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Nos. _____ and _____

IN THE

Supreme Court of The United States

OCTOBER TERM, 1981

UNION TEXAS PETROLEUM, a DIVISION of ALLIED CHEMICAL CORPORATION, et al.,

Petitioners,

v.

CORPORATION COMMISSION OF OKLAHOMA and HARVEY W. DIERKSEN, et al.,

Respondents.

ON PETITION FOR WRIT OF CERTIORARI TO THE SUPREME COURT OF THE STATE OF OKLAHOMA

APPENDIX TO PETITIONS FOR WRIT OF CERTIORARI

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June 7, 1982

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IN THE SUPREME COURT OF
THE STATE OF OKLAHOMA

UNION TEXAS PETROLEUM, A Division of Allied Chemical Corporation; CHAMPLIN PETROLEUM COMPANY; ATLANTIC RICHFIELD COMPANY; AMERADA HESS CORPORATION; EASON OIL COMPANY; HARPER OIL COMPANY; SINGER-FLEISCHAKER OIL OPERATING COMPANY, INC; OKLAHOMA NATURAL GAS COMPANY; HENRY H. GUNGOLL ASSOCIATES; L. O. WARD; CARL E. GUNGOLL; WOODS PETROLEUM CORPORATION; ODESSA NATURAL CORPORATION; MACK OIL COMPANY; OKMAR OIL CORPORATION and LADD PETROLEUM CORPORATION,	)
Appellants,	) No. 53,181 (Surviving number).
v.	) (Nos. 53,226, 53,227 and 53,259 consolidated)
THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA, HARVEY W. DIERKSEN, et al.	)
Appellees.	)

APPEAL FROM THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA

In an application for an order modifying a previous drilling and spacing unit order of the Corporation Commission, applicant sought to de-space one-section units and respace those units at 160-acre parcels, alleging change of conditions and change of knowledge of conditions. The Corporation Commission granted the requested relief. Protestants allege such an order of modification is not supported by substantial evidence and was infirm by virtue of improper notice to certain parties, and they prosecute this appeal.

REVERSED IN PART; AFFIRMED IN PART

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Gordon F. Brown, Esq. Brown & Lockhart Oklahoma City, Oklahoma	For Henry H. Gungoll Associates, Wood Petroleum Corporation, Odessa Natural Corporation, Mack Oil Company, L. O. Ward, Okmar Oil Corporation, Ladd Petroleum Corporation, and Carl E. Gungoll.
H. B. Watson, Jr., Esq. Richard K. Books, Esq. Oklahoma City, Oklahoma	For Tenneco Oil Company and Union Oil Company of California, Appellants.
Harvey Cody, Esq. Conservation Attorney Oklahoma Corporation Commission Oklahoma City, Oklahoma	
Jan Eric Cartwright, Esq. Attorney General, State of Oklahoma Oklahoma City, Oklahoma	For Corporation Commission of the State of Oklahoma.

Walker, Walker & Corbyn
by Barth B. Walker, Esq.
Oklahoma City, Oklahoma For Harvey W. Dierksen, et al.

Appellees.

HARGRAVE, J.

This is an appeal from Order No. 148243 of the Corporation Commission of the State of Oklahoma dated January 3, 1979. That order vacated eighty-eight 640-acre drilling and spacing units, and established 160-acre drilling and spacing units. One hundred eleven applicants joined in the application which produced this order, and in that application they alleged that the prior orders of the Corporation Commission would demonstrate that the Mississippian formation constituted a single common source of supply in the region covered by the application and that the prior orders clearly demonstrated that there had been substantial change of conditions or knowledge of conditions as to that common source of supply, and that in order to prevent waste and protect correlative rights, that change in knowledge of conditions required that the previously existing 640-acre drilling and spacing units be vacated and that drilling and spacing units be established which created 160-acre drilling and spacing units for the Mississippian.

The Mississippian formation underlying the area covered by this application is a gas producer which produces increasing amounts of oil as proportionate to total production along the southeastern portion of the area covered by the application. In that southeasterly

portion there have been in the past a number of additional wells drilled on the basis of applications granted on an increased density basis by virtue of the oil production there had. The applicants sought to establish a change in knowledge of conditions underlying the land encompassed in the application and that that change in knowledge of conditions established that 640-acre Mississippian units were incapable of draining the entire formation in the area.

The appellants resisted the application to vacate the 640-acre spacing units and establish 160-acre drilling and spacing units, alleging there had been no substantial change in conditions and thus the application constituted a collateral attack on previous order of the Corporation Commission. Additionally, the appellants alleged that the Mississippian formation throughout this area is, in part, productive of oil as well as gas and the proper method to proceed upon that change in condition was by an order increasing the density of the drilling in the previously existing 640-acre units, noting that the spacing and respacing on proof of change of condition is contrary to the historical policy of the Commission which has been to increase density rather than vacate units and reestablish on the basis of smaller acreage. Appellants Tenneco Oil Company and Union Oil Company of California argue in their appeal that the subject order must be vacated because it was entered by the Corporation Commission outside of the regular pursuit of its authority. The basis of such a proposition is that the June 13, 1978 application of the appellee, which is the original application producing the order upon which this appeal is based, failed to list the appellants Tenneco and Union then owning interests in the area sought to be de-spaced, and that those two appellants had received no notice of the pro-

ceedings. Despite this lack of notice, Union and Tenneco made a special appearance before the Commission prior to the hearing on the order objecting to the jurisdiction of the Commission on that basis and requesting the application be dismissed. Argument was heard prior to the hearing on the merits and the motion to dismiss was denied by the Commission's order of July 7, 1978. This failure to properly serve Union and Tenneco allegedly resulted in a violation of the Commission's own rules and regulations and of the appellants' right to due process, under the line of cases arising out of *Mullane v. Central Hanover Bank & Trust Co., 339 U.S. 306, 70 S.Ct. 652, 94 L.Ed. 865 (1950).*

Appellants Union Texas Petroleum, a division of Allied Chemical Corporation, Champlin Petroleum Company, Atlantic Richfield Company, Amerada Hess Corporation, Eason Oil Company, Harper Oil Company, Singer-Fleischaker Oil Operating Company, Inc., Oklahoma Natural Gas Company, Henry H. Gungoll Associates, L. O. Ward, Carl E. Gungoll, Woods Petroleum Corporation, Odessa Natural Corporation, Mack Oil Company, Okmar Oil Corporation, and Ladd Petroleum Corporation, raise four propositions of error for disposition in their appeal. First, that there is no substantial evidence showing a change in conditions or knowledge of conditions which would authorize the Corporation Commission to vacate its prior 640-acre drilling and spacing unit order. The second point is that the decision of the Commission to destroy the 640-acre drilling and spacing units and thereupon establish 160-acre units is an arbitrary act which violates the vested rights of the owners of the oil and gas leases held by unit production and the vested rights of the royalty owners. Included in this point is the assertion

that there is no evidence to support the Commission's choice from among the two statutory remedies of permitting increased density of drilling or vacation of the established drilling units and creation of smaller drilling and spacing units in their place. The third point made by these appellants is that the order fails to include some 640-acre drilling and spacing units in the same common source of supply, thereby violating the correlative rights of the owners. The fourth point made in this appeal by these appellants is that the applicants did not comply with the rules of the Commission and that proper response to these failures by the Commission should have been to dismiss the application upon motion made prior to commencement of the hearing.

The orders of the Corporation Commission amended by the order now on appeal start with an order establishing 640-acre drilling and spacing units for the Mississippian gas and gas condensate common source of supply within a 40 square mile area in Major and Garfield Counties dated June 22, 1962. As of that date, only two wells had been completed in the area. That order finds one well adequately drains 640 acres. A year and a half later, the Corporation Commission found in its Order No. 53477 that Sec. 26, T22N, R8W, comprising a 640-acre drilling and spacing unit, was in fact oil productive, and further found that three additional wells were necessary to drain that unit. Those wells were permitted by the order and were found necessary to effect drainage of the section, and to date, only two of the three authorized wells have been drilled, the latter of those two having been drilled in 1978. A later order found the Mississippian in this area to be a combination oil and gas reservoir. The Corporation Commission's Order No. 50337 established 640-

acre drilling and spacing units for the Mississippian as gas and gas condensate common source of supply for a nine square mile area in Garfield County, located one mile from the area covered by Order 49133. The order now appealed from establishes as one common source of supply the area as covered in Order No. 49133 and Order No. 50337. The findings of the Corporation Commission incorporated in the now-appealed Order No. 148243 set forth the following:

> When Previous Order No. 49133 was issued only two wells had been drilled within the area. When Order No. 50337 was issued, only one well had been drilled within the covered area. Six hundred and forty acre drilling and spacing units were first established because the Mississippian was indicated to be gas and gas condensate common sources of supply, and it was then concluded that one well could be expected to effectively drain the recoverable gas and the condensate from those 640-acre units. These two initial orders cover the Mississippian, a common source of supply, although the orders treated the areas as separate from each other. At the time of the issuance of these two orders, it could not have been reasonably foreseen that both oil and gas would be found in the areas. There has been a substantial change in conditions and knowledge of conditions in the Mississippian Lime as to the hydrocarbon saturation, oil, gas and gas condensate. There has also been a substantial change in knowledge of conditions relating to the effective drainage radius of the well sunk to the Mississippian Lime and of the attributes of such formation, particularly porosity, permeability, water saturation, hydrocarbon saturation, pay thickness and lithography.

The Commission also found that there had been a substantial change in the orderly development of the

area by the necessary granting of numerous exceptions to well density and drilling and spacing unit size, irrespective of the pattern contemplated by the issuances of Orders No. 49133 and 50337. The Commission then determined that the development of the Mississippian Lime in this area viewed in respect to the production of wells already drilled in conjunction with the drilling and production of wells which will be required in the future demonstrates that a more orderly administration of the area is necessary to assure that those wells reasonably required to prevent waste and protect the correlative rights can or will be drilled. The Commission's conclusions delineate the following:

> The evidence of applicants and of the protestants is comparable on the point of the conditions and knowledge of conditions in the Mississippian Lime when the two orders, No. 49133 and 50337, were issued. Similarly, the evidence is comparable when viewed from the standpoint of the now known conditions and knowledge of conditions. However, despite comparable knowledge derived from both historical and current development in operations the two parties differ as to the most reasonable and equitable basis for future orderly development. Protestants have been granted numerous exceptions to Orders 49133 and 50337 as amended. Those exceptions relate to density and variation of drilling unit size upon allegations and proof that there had been a change in conditions or a change in knowledge of conditions in the formation. However, they now contend there has been no change of conditions or knowledge of conditions with respect to the 640-acre units.

The order continues, noting the protestants have urged the appropriate statutory remedy (of the two statutorily provided) is to further develop the area on an in-

creased well density basis upon application of an owner in the unit. The order then notes the interest of the Commission in the prevention of waste and protection of correlative rights requires that the Commission, in this instance, not delegate the responsibility for initiation of requests for increased density drilling to owners whose subjective interest in the premises may be in conflict with the ends of waste prevention or correlative rights protection. Further, the order recites there is substantial evidence to show that there has been and is now a change in conditions and knowledge of conditions, arising from the historical development in production and the area covered by the application. The change recited in the order is that the Mississippian Lime is far less conducive to effective and efficient drainage by one well on a 640-acre unit than it was thought and contemplated to be when Orders 49133 and 50337 were issued in 1962. The 640-acre unit was found not to be causing the Mississippian formation to be effectively and efficiently drained, resulting in unnecessary depletion and inefficient utilization of gas energy pressure in the common source of supply. The order further states that correlative rights cannot be thus protected by the continuation of 640-acre units. The Mississippian within the application area required 160-acre drilling and spacing units be established, and that a well on each 160-acre unit is necessary to effectively and efficiently drain a portion of the reservoir allocated to it. The order then concluded by vacating previous Order No. 49133 and 50337 as amended as to the Mississippian from 6,300 feet to 6,700 feet below the surface and as to 640-acre drilling and spacing units established by those orders. The order then established 160-acre drilling and spacing units. The order then noted: Piecemeal relief has been

given in prior times by increasing the density of wells upon the 640-acre units but the Commission concludes here that the establishment of 160-acre units is the proper relief, notwithstanding the fact that other relief is available based on substantial evidence herein.

Tenneco Oil Company and Union Oil Company of California propose the judgment must be vacated here on appeal because, as the transcript of the hearing on the motion to dismiss reveals, neither of these parties received notice of this proceeding. Additionally, they point out the affidavit of mailing notice filed June 29, 1978 indicates no notice was sent at all to Union and was sent to an improper address for Tenneco. These appellants state that notice and service of pleadings upon parties owning the right to participate must be made under Rule 8(d) (3)[1] of the Oklahoma Corporation Commission Rules of Practice. Failure to do so violates the last cited rule and does violence to appellants' right to due process under *Mullane v. Central Hanover Bank & Trust, supra, and Bomford v. Socony Mobil Oil Co., 440 P.2d 713 (Okla. 1968).* Appellants contend that the Corporation Commission is restricted in the valid ex-

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[1] "(d) Service in Special Cases:

. . .

(3) Applications for Amendment of Conservation Orders. At any time subsequent to the commencement and prior to the plugging and abandonment of a well upon a drilling and spacing unit, in lieu of service under subsection (b) of this rule, notice of hearing of an application to vacate, alter, modify or amend an order creating a drilling and spacing unit; to delete land from, increase or decrease the size of the drilling and spacing unit or for increased or decreased density of wells within the unit, shall be served by the applicant by regular mail *upon each person having the right to participate in production from the unit.* An affidavit shall be filed prior to hearing the application, stating the names and addresses of the persons so served, and that notice has been mailed pursuant to this rule." (Emphasis added)

ercise of its statutory authority to follow its administrative rules, and further that the Commission may not correctly act outside of those rules, citing *H. F. Wilcox Oil & Gas Co. v. State, 162 Okla. 89, 19 P.2d 347 (1933)*, and *Pacific Molasses Company v. F.T.C., 356 F.2d 386 (5th Cir. 1966)*. Appellants admittedly cite pertinent authority in *Mulane, supra*, and *Bomford, supra*. Although familiar, the footings of the *Mullane* decision are both abstractly fundamental and immediately indispensable to the resolution of the error here offered. This action involves the roots of the holding of *Mullane*, and the basis upon which it rests. In *Mullane*, at *339 U.S. 313, 70 S.Ct. 656-657*, the Supreme Court noted that although controversy has at times raged about the meaning of the due process clause, it affords at least a limitation requiring that a deprivation of life, liberty or property by adjudication be preceded by notice and the opportunity for a hearing appropriate to the nature of the action. The fundamental requisite of due process of law is the opportunity to be heard. *Grannis v. Ordean, 234 U.S. 385, 394, 34 S.Ct. 779, 783, 58 L.Ed. 1363 (1914)*. The opportunity to be heard is worthless without notification of the occasion requiring it, so that the affected individual may choose for himself whether to appear or default. In *Mullane, supra*, the court looked to the steps necessary to assure that notice is reasonably calculated under all the circumstances to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections, stating that the notice given must be such as is reasonably calculated to convey the required information in a timely manner so as to allow interested parties to make their appearance. The common thread of the opinion is reasonableness. "The criterion is not the possibility of conceivable injury, but the just and reasonable char-

acter of the requirements having reference to the subject with which the statute deals." *Mullane* at *339 U.S.* at *315*. The central point made in *Hanover* is that notice must be reasonably calculated to import actual knowledge of the suit.

Appellant Union Oil Company of California states it was never served by mail. The affidavits of mailing confirm that allegation. Appellant Tenneco Oil Company states service upon it was improper in that "the notice sent to Tenneco was improperly addressed." There is no allegation in the briefs, or lengthy record of this appeal, which indicates there was any prejudice resulting from the improper address on Tenneco's notice. The record indicates service by mailing was made. If the incorrect address resulted in failure to give notice that fact should have been raised. The appellant, Tenneco, has not alleged in the proceedings before the Commission that the improper address resulted in failure to impart notice. A mere defect in formal style or nomenclature will not invalidate service of process unless it actually resulted in failure to give notice, as can be discerned from the excerpts from *Mullane* which demonstrate the inquiry is centered on what steps are necessary to impart actual notice, and not formalistic ritual of service of process.

Here the appellant has offered as a jurisdictional error the mailing of notice to Tenneco at an incorrect address. The record discloses publication notice in Oklahoma County and the two counties in which the land is located, as well as a mailing of notice to Tenneco. Tenneco's mailing address utilized here was the "Cuidad Building." Whether this address is correct or not is not a matter disclosed by the record on this appeal. No atttempt was made to demonstrate the

erroneous nature of the address during the motion to dismiss when this jurisdictional error was offered. Such evidence would appear dehors the record, — therefore the record does not demonstrate that the order here appealed is void for failure to acquire jurisdiction over the person of Tenneco.

The error offered fits within the rationale of *Vinson v. Oklahoma City, 179 Okla. 590, 66 P.2d 933 (1937)*, wherein the failure to mail copies of the petition and notice there offered as reversible error do not appear on the face of the record. The judgment affirmatively negated the alleged failure, reciting that all defendants not answering or appearing have been served with summons personally or by publication. In reference to this aspect of the cause, the second Court syllabus holds that where service is obtained by publication and the judgment recites service is proper, the judgment is not void on its face, consequently an attack on the judgment on the basis of failure to mail a copy of the petition and publication notice can only be made under the provisions of the predecessor of 12 O.S. 1971 § 1031, Third. In *George v. Kinard, 84 Okla. 95, 202 P. 503 (1921)*, the Court stated a judgment is not void in the legal sense for want of jurisdiction, unless its invalidity and want of jurisdiction appear on the face of the record; it is voidable merely where the objection is raised because of failure to serve process.

Here the proceeding was questioned at its outset by Tenneco on the ground "that the notice was sent to the wrong address." However, no evidence of the extrinsic fact of the correct address or failure to impart notice arising from the address listed was offered, and thus the order of the Corporation Commission stands unchallenged by proof or offer of the extrinsic fact necessary to demonstrate its invalidity.

As to Union Oil of California, however, the holding of the recent case of *Cravens v. Corporation Commission, 613 P.2d 442, (Okla. 1980)*, is controlling. The record contains no notice of a mailing to this entity and thus the record demonstrates the Commission attempted to proceed against Union's interest in the absence of jurisdiction over the person of that entity. Accordingly, the order's attempt to adjudicate the rights of Union Oil of California is ineffective, and a nullity insofar as it purports to affect its interests.

The appellants Union Texas Petroleum, Champlin Petroleum, Atlantic Richfield, Amerada Hess, Eason Oil, Harper Oil, et al., direct their first proposition of error against the merits of the proceeding, arguing the Commission was without authority to amend its previous order inasmuch as the evidence disclosed no substantial change of conditions. This contention is based upon the prohibition contained in 52 O.S. 1971 § 111 against collateral attacks upon a final order of the Corporation Commission. Under that statute, and the cases arising out of it, such as *Wood Oil Co. v. Corporation Commission, 205 Okla. 534, 239 P.2d 1021 (1950)*, and *Phillips Petroleum Co. v. Corporation Commission, 461 P.2d 597 (1969)*, an application for an order of modification constitutes a collateral attack on the prior order where that modification is not based upon substantial evidence showing a change of conditions or knowledge of conditions arising since the last order. *Phillips Petroleum Company, supra*, illustrates the fact that the change of conditions or change in knowledge of conditions necessary to support an order of modification speaks to knowledge or conditions which did not obtain at the time the prior order was considered, and not to evidence of conditions or knowledge of conditions

which could have been brought forward at the time of the hearing on the prior order but were not considered at that time.

Phillips, supra, cites with approval 11 Okla. Law Rev. p. 125, "Modification Order Pertaining to a Common Source of Supply" at pp. 132 and 133, where the author of the article states: "Logically there are three kinds of change of condition possible. The first type of change of conditions is characterized by an actual change in the physical behaviour of the reservoir occasioned by development and depletion. Second is a change in the information gained from development or depletion experience which demonstrates that the original conclusions reached were incorrect as applied to the studied reservoir, and the third type is, in essence, a change in the technology used to exploit the reservoir, bringing to bear new concepts of waste and correlative rights." As the appellants recognize in their brief in chief, a change of condition alleged to justify a modification of a prior order of the Corporation Commission in this action was that new knowledge has been obtained that in this area a Mississippian gas well would not drain a 640-acre unit. The appellants contend there is no substantial evidence to sustain this finding and that the Commission should have denied the application on that basis.

The appellants also note that under *Harper Oil Co. v. Hayes, 431 P.2d 387, (Okla. 1967),* and *Meredith v. Corporation Commission, 368 P.2d 828, (Okla. 1961),* a spacing order of the Corporation Commission applies to all wells in the common source of supply whether or not an individual well turns out to be an oil well or a gas well. Appellants contend that it has been known for a considerable period of time that the Mississippian

formation in the area covered by the orders under consideration now has been capable of oil as well as gas production. This contention is intended to demonstrate there has been no change in knowledge of conditions obtaining since the prior orders, thus defeating the modification here granted. This known fact is not determinative of the issues here presented, which revolve around the inability of the 640-acre unit to be adequately drained by a single well in light of the additional experience with the character of the formation through drilling and production since the last orders were issued. This additional experience was recognized in *Phillips Petroleum Co. v. Corporation Commission, supra*, as a viable ground upon which to base a motion to modify a prior Corporation Commission order. Thus the inquiry remains: Is the order of modification supported by substantial evidence that a well in this locality of the Mississippian formation would not drain 640 acres? The order initially establishing 640-acre units, 49133, was issued after two wells had been completed in a 40-square mile area. Finding No. 4 from that order reads:

> "... One well will adequately drain the gas and gas condensate from said formation underlying 640 acres and that it is unnecessary to drill wells on a closer pattern."

The appellee contends that a substantial change in knowledge of conditions is established both by the primary evidence in this cause and by reference to the prior actions taken in the Corporation Commission by the appellants themselves. An example from testimony in this cause is taken from testimony of Mr. F., qualified as an expert without objection. He states Finding No. 5 in Corporation Commission's previous order 134466, in

his opinion, is generally applicable through all the units in this particular case. Finding No. 5 recites:

> "That applicants' Wuerflein No. 1 well is now 80 to 90% depleted and applicants' experience in the infield drilling of Mississippian wells on existing spacing units in the area which were previously developed by drilling one well has demonstrated that after the initial wells in each drilling and spacing unit were substantially depleted, the additional well in said drilling and spacing unit encountered initial shut-in bottom hole pressures and production volumes which were comparable with the initial shut-in bottom hole pressure and unit production volumes of the first wells drilled in each unit."

This same witness testified that, in his expert opinion, Paragraphs 7 and 8 of the findings in that same order would apply to each of the drilling and spacing units included within the purview of the action here appealed. Quoting from the record where the provisions of Paragraphs 7 and 8 are recited into the record:

> "Applicant has concluded that the infield wells drilled on each unit penetrated a portion of the Mississippian common source of supply that is not being adequately drained by the initial well and that the reservoir conditions in the Mississippian formation common source of supply underlying the lands described in the caption hereof are believed to be comparable in all respects to the conditions encountered in the units on which the Mississippian infield drilling has taken place in the area, so that it is reasonable to conclude that the Wuerflein Unit No. 1 well will not adequately and completely drain the recoverable gas in the Mississippian formation."

"It appears that the Wuerflein unit well will not adequately and completely drain the recoverable gas in the Mississippian formation underlying the unit, and that a second well on said formation will recover additional gas and associated hydrocarbons that will not be produced from existing wells."

The record also indicates a similar finding in Order No. 140576 wherein Finding No. 8 in that order states:

"That the testimony was that it is economically feasible to drill a third well on this spacing unit, and that a third well will recover additional oil and gas that would not otherwise be recovered by existing wells."

Mr. F. testified that in his expert opinion he would reach the same conclusion in consideration of each and all of the drilling and spacing units covered by this application on appeal.

The Commission's report included in Order # 148243 contains the better part of nine legal pages of single-space typing containing the history of modifications of the two base orders, 49133 and 54890. This history demonstrates that order 49133 has at times included twice as many section units as are presently under its purview. Twenty-five of these sections have been authorized additional wells and of these a substantial percentage have been altogether excluded from the original order. Many of these orders reviewed exclude sections from the order and establish smaller units or allow additional wells on the basis that the unit is unable to drain or on the basis that there is a change in production from gas to oil or in the knowledge of the mechanics of the formation.

The Commission's report shows that order 50337 originally formed 640-acre spacing on nine sections on the basis of one previously drilled well. Thereafter that order was extended and some sections then included were deleted later and spaced in 80-acre units for oil.

The Corporation Commission's order here appealed from then states the following after reviewing the history of the two orders:

1. The two parent orders, 49133 and 50337 were issued upon the strength of a total of three well drilling experiences showing a gas and gas condensate field.

2. At the time of issuance it could not reasonably have foreseen the mixed character of the common source or the numerous exceptions both to density of drilling and spacing unit size necessary to prevent waste and protect correlative rights.

3. There has been a substantial change in knowledge of conditions and characteristics of the formation, such as hydrocarbon saturation, oil and gas mix, effective drainage radius, and formation characteristics such as permeability, water saturation and effective pay thickness.

4. There has been a substantial change in the orderly development of the areas considered than was contemplated at the time the original orders were issued.

5. The conditions, and knowledge of them, now prevalent pertaining to the formation and current production as well as future production require a more orderly development than that had under the 640-acre unit and exception therefrom procedure.

The conclusions made by the Corporation Commission included in the order appealed here note that the protestants and applicants differ more in their proposed solutions to future equitable production than in substantive differences as to past and present known conditions of the Mississippian. The conclusions state that in past times, protestants have obtained exceptions by way of variations in drilling unit size and increased density orders on the basis of allegations of change of condition but now protestants are contending that there has been no change of condition justifying a modification order. The Commission concluded that the protestants desire to have further development on an increased density basis upon application by an owner of a unit when he determines that such action should be taken. The Commission concluded leaving that decision to the individual unit owners, under the circumstances, amounts to an indirect delegation of its duty to oversee prevention of waste and protection of correlative rights. Additionally the Commission concluded that the Mississippian is less conducive to drainage by 640-acre units than was contemplated when the parent orders were issued. The pressure depletion now experienced will not drain a 640-acre unit, resulting in efficient utilization of gas energy in the common source which will cause substantial quantities of oil, gas and condensate not to be recovered by a continued 640-acre unit. The Commission concluded that 160-acre units are reasonably required to drain the reservoir effectively and efficiently, notwithstanding the recognized existence of alternate forms of relief that may be available based upon the substantial evidence submitted.

The Commission heard evidence from both sides of the controversy, and various research methods and validity of statistical analyses, and conclusions drawn therefrom were closely contested and conflicting. The appellants' contention that there is no evidence of substantial change of condition upon which to base an order of modification is refuted by reference to the history of the Commission's orders relative to the area covered by the parent units, and by the allegations of change of condition made in earlier proceedings by some of the contestants herein. Those allegations of change of condition gave the Commission a factual basis upon which to modify orders and grant exceptions. Referring to appellants' Exhibit #40, we note that roughly thirty-four sections have been allowed additional wells in the area covered by the parent orders and fifty sections have been deleted from those orders for reasons which generally support showing of change in knowledge of the characteristics of the formation.

An objection to an order made by the Corporation Commission does not initiate an independent inquiry in this Court as to the factual support for the order under Article IX, Section 20, Oklahoma Constitution, unless an asserted violation of either state or federal constitutional principles is to be reviewed. *Anderson-Prichard Oil Corp. v. Corporation Com'n, 205 Okla. 672, 241 P.2d 363 (1951).* However, an allegation of violation of those constitutional principles by issuance of an order not supported by substantial evidence does not invoke an independent review of the evidence. *Cameron v. Corporation Commission, 414 P.2d 266 (Okla. 1966).*

The Commission has a wide discretion in the performance of its statutory duties, and this Court may not

substitute its judgment upon disputed factual determinations for that of the Commission but is restricted to a determination of substantial evidentiary support for the order issued under authority of the statutes. *In re: Application of Continental Oil Company, 376 P.2d 330 (1962).* Searching a record for substantial evidence supporting the order appealed does not entail a comparison of the parties' evidence to determine that which is most convincing but only that the evidence supportive of the order be considered to determine whether it implies a quality of proof inducing a conviction that the evidence furnished a substantial basis of facts from which the issue could be reasonably resolved. *Chenoweth v. Pan American Petroleum Corp., 382 P.2d 743 (Okla. 1963).* Substantial evidence has been additionally outlined as something more than a scintilla; possessing something of substance and of relevant consequence carrying with it a fitness to induce conviction, but remains such that reasonable men may fairly differ on the point of establishing the case. A determination of substantial evidentiary support does not require weighing the evidence but only a measurement of the supportive points to determine whether the criterion of substantiality is present. *Central Okla. Freight Lines v. Corporation Com'n, 484 P.2d 877, 879 (Okla. 1971).*

A review of supportive facts here present compels the conclusion that the order is supported by substantial evidence. Previous Corporation Commission orders have granted deletions and increased density orders to some of the appellants on the basis of change in knowledge of conditions and these changes have been made on approximately half the acreage comprising the area covered by the two parent orders and this order.

Appellants object to the order here issued on the additional basis that there is no substantial evidence to support the Commission's action of ordering deletion of the large units as opposed to ordering increased density drilling on established units. Such an allegation of error is insufficient to disturb the Commission's order on the basis of statutory authority and the evidence disclosed in the record. Factually, the record contains indicia that for extended periods of time, Commission orders allowing additional wells on the basis of inability to recover known reserves have not been carried out. Known inability to recover product and protect correlative rights after a demonstrated change in knowledge of conditions has not been remedied in the area by past orders to increase density, and under 52 O.S. Supp. 1978 § 87.1d, the alternative remedy granted here is decreasing the size of the well units. That portion of the last mentioned statute reads:

> The Commission shall have jurisdiction upon the filing of a proper application therefor, and upon notice given as provided in subsection (a) above, to decrease the size of the well spacing units or to permit additional wells to be drilled within the established units, upon proper proof at such hearing that such modification or extension of the order establishing drilling or spacing units will prevent or assist in preventing the various types of wastes prohibited by statute, or any of said wastes, or will protect or assist in protecting the correlative rights of persons interested in said common source . . .

Appellants cite *Grison Oil Corp. v. Corporation Commission, 186 Okla. 548, 99 P.2d 134 (1940)*, as supportive of the proposition that private rights should be interfered with as little as possible where such disruption is necessitated by an exercise of the police power

in the prevention of waste. It would be unusual to encounter a party disagreeable to such a statement. The Commission's conclusion that past density applications by owners in the unit have not uniformly developed the common source, and have not been carried out with dispatch, negates the allegation that both statutory remedies are equally suited to the facts, and substantial evidence supports the choice of alternatives made by the Commission.

Appellants additionally contend the Commission's order respacing these sections as 160-acre units must be reversed by virtue of the Commission's failure to respace the entire common source. As the exhibits demonstrate, the order here appealed covers the center of the two parent orders, while the parent orders extend southwest and north of the order appealed. Prior orders have stated that both parent orders cover the same common source.

As early as the motion to dismiss the Commission was requested to proceed on a piecemeal basis, one section at a time. At the hearing on the merits, the appellants also objected to consideration of such a large area in one proceeding. This was done both by reference to the burden laid on the parties by entertainment of a modification application on a 92-section area, and by objection to testimony on the basis that expert evidence should be limited in impact to the unit from which the engineering data was gathered. Appellants actively requested the Commission to consider the modification request on a piecemeal basis, but now seek reversal of the order on the ground that the one proceeding did not encompass the entire common source. Given this position taken in the hearings below, it is inappropriate to now allow reversal of the Commission's order on

grounds which directly conflict with the parties' position below. Parties to an action on appeal are not permitted to secure a reversal of a judgment upon error which they have invited and acquiesced in, or to assume an inconsistent position from that taken in the trial court. *Cimarron Valley Pipe Line Co. v. Holmes, 182 Okla. 450, 78 P.2d 403 (1938); Cities Service Oil Co. v. Merritt, 332 P.2d 677 (Okla. 1958).* As early as *Morrison v. Krouch, 141 Okla. 288, 285 P. 10 (1930),* the related principle was considered as firmly established. In *Morrison,* the first Court Syllabus reads: "It is a well-settled rule that a party to a suit, having proceeded in the trial court upon a theory and lost, will not be permitted, upon appeal to this court, to change his theory and seek to reverse a case upon a different theory." The rule emanates from the very heart of the purpose served by an appeal. In *Breene v. Crawford, 175 Okla. 186, 53 P.2d 244 (1935),* the Court held that a defendant will not be allowed to shift his ground of defense on appeal in order to present another defense not presented nor relied upon in the trial court. To allow such a traverse in theory at the appellate level thwarts the very basis of the appellate process. The purpose of an appeal is not to present an opportunity for a trial de novo, but to review the correctness of the rulings made upon the arguments of the trial court. The parties to an action, having presented their case for defense to the trial court upon a certain theory, are bound thereby and will not be permitted to change the theory of the case upon appeal. See also: *Knox v. Eason Oil Co., 190 Okla. 627, 126 P.2d 247 (1942); Louis Berkman Co. v. Unger Metals Corp., 190 Okla. 101, 121 P.2d 606 (1942); Foster v. Higginbotham, 186 Okla. 276, 97 P.2d 63 (1939); Secrest v. Williams, 185 Okla. 449, 94 P.2d 252 (1939); Cadwell v. Ryan, 185 Okla. 158, 90 P.2d 887 (1939); U.S. Fidelity & Guaran-*

ty Co. v. State ex rel. Shull, 169 Okla. 59, 36 P.2d 47 (1934); Ward v. Continental Ins. Corp., 169 Okla. 59, 36 P.2d 47 (1933); Cope v. Johnson, 123 Okla. 43, 251 P. 985 (1926).

The order of the Corporation Commission is determined to be supported by substantial competent evidence and is therefore affirmed; provided that no part thereof is valid insofar as it affects the rights and interests of Union Oil of California, and is reversed insofar as it attempts to adjudicate the rights of Union Oil of California.

REVERSED IN PART; AFFIRMED IN PART.

Barnes, V.C.J., Williams, Lavender, Doolin and Opala, JJ, Concur.

Irwin, C.J., Hodges and Simms, JJ., Dissent.

IN THE SUPREME COURT OF
THE STATE OF OKLAHOMA

UNION TEXAS PETROLEUM, a Division of Allied Chemical Corporation, et al.,	)	
Appellants,	)	
v.	)	No. 53,181
THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA; and HARVEY W. DIERKSEN, et al.,	)	
Appellees.	)	

ORDER

Upon careful consideration and review of the appellants' motion for rehearing, this Court finds that said motion for review should be denied.

IT IS SO ORDERED.

DONE IN CONFERENCE BY THE SUPREME COURT THIS 8th day of March, 1982.

ROBERT E. LAVENDER,
Associate Justice

Concur: Lavender, Doolin, Hargrave, Opala and Wilson, JJ.
Dissent: Irwin, C.J., Barnes, V.C.J., Hodges and Simms, JJ.

IN THE SUPREME COURT OF
THE STATE OF OKLAHOMA

UNION TEXAS PETROLEUM, a Division of Allied Chemical Corporation, et al.,	)	
Appellants,	)	
vs.	)	NO. 53,181
THE CORPORATION COMMISSION OF THE STATE OF OKLAHOMA; and HARVEY W. DIERKSEN, et al.,	)	
Appellees,	)	

DISSENTING OPINION BY BARNES, V.C.J.:

Upon rehearing in this cause and upon reconsideration of the opinion promulgated herein on July 21, 1981 (52 OBJ (Vol. 52 - No. 30) 1857), I hereby change my vote from "concur" and must respectfully "dissent".

My first departure from the Majority's conclusion pertains to the standard of review to be used in this case.

Article IX, Section 20, Oklahoma Constitution, makes two provisions relative to the duty and power of this Court in considering appeals from orders of the Corporation Commission. In appeals from orders of the Corporation Commission, "the review by the Supreme Court shall not extend further than to determine whether the Commission has regularly pursued its authority, and whether the findings and conclusions of the Commission are sustained by the law and sub-

stantial evidence." However, in those appeals involving an "asserted violation of any right of the parties" under either the State or Federal Constitution, "the Court shall exercise its own independent judgment as to both the law and the facts." Such independent review of the evidence is only invoked if Appellant points out "in what specific respect his constitutional rights have been violated" and if the constitutional violations are "clear-cut".[1] Appellants contend "that each of the 540-acre drilling and spacing units had been developed in the Mississippi Formation by the drilling of one or more wells, and the order of the Commission destroys existing equities of both the royalty owners and the owners of the oil and gas leasehold estate and takes their property for private use in violation of Section 23 of Article II of the Constitution of the State of Oklahoma and deprives them of their property without due process of law in violation of Article II, Section 7, of the Constitution of the State of Oklahoma, and in violation of the Fourteenth Amendment to the Constitution of the United States of America." Such asserted constitutional violations could not be more "specific" or "clear-cut", and therefore this Court must exercise its own independent judgment in this case as to the law and facts. Whether the order appealed from falls within the first or second category, to be valid it must be lawful and supported by competent substantial evidence.[2] It is my opinion that using either the standard of independent review of the evidence or the standard of substantial evidence, it is clear, as will be discussed later, that the order in question is invalid and should not stand.

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1. Cameron v. Corporation Commission, 414 P.2d 266 (1966); and Southern Union Gas Co. v. Texas County Irrigation & Water Resources Association, 564 P.2d 1004 (1977).
2. Anderson-Prichard Oil Corp. v. Corporation Commission, 241 P.2d 363 (1951).

Secondly, I disagree with the Majority's holding that there was substantial evidence to support the conclusion that the wells on each of the eighty-eight 640-acre units covered by the application were not draining the units. This is the claimed "new knowledge" and change of condition upon which the application and the order of the Commission depend. The case cited by the Majority, *Phillips Petroleum Co. v. Corporation Commission, 461 P. 2d 597 (1969)*, states:

> "... Because substituted substantive rights actually vest in the property owners by the force of such orders, the Oklahoma Supreme Court has laid down the rule that a modifying order will be condemned as a prohibitive collateral attack unless 'a substantial change of condition' has intervened between the dates of the existing and superseding orders."

The evidence reflects that the Mississippi Lime Formation underlying the area covered by the application is a heterogeneous reservoir. The southeasterly portion of the area covered by the application contains oil pods or oil pockets. It is known that there is a transition zone. A transition zone is an area where the wells produce both free oil and free gas. Everything north of the transition zone will be predominantly productive of gas, and everything south thereof will be predominantly productive of oil and gas. Appellants and Appellees agree that one well will not effectively drain the 640 acres in the oil area. Operators of the wells in the oil area had applied for and been granted permission to drill a number of additional wells in the drilling and spacing units lying within the oil "leg". The basis of the application for additional wells was that the oil reservoir underlying some of the drilling and spacing units could not be properly developed without the drilling of additional wells. A number of applications

for increased density within some of the drilling and spacing units in the southern portion of the formation were on file at the time the application in this cause was filed, but hearings were postponed and will not be heard until this case is decided.

The Commission's Order No. 148243 de-spacing the eighty-eight 640-acre units and the Majority's conclusion that such order was supported by substantial evidence are based on the proposition that new knowledge has been obtained which demonstrates that *none* of the Mississippi wells on *any* of the eighty-eight governmental sections covered by the order will effectively drain the units. This conclusion is based upon the testimony and calculations of Appellees' expert witnesses. Appellees' experts calculated volumetric estimates of gas in place and compared these estimates with pressure decline curve estimates of gas in place. From this comparison, the experts arrived at their estimate of the percentage of the 640-acre units that were being drained by the unit well.

A pressure decline curve will indicate how much gas will be produced from a particular well, but will not show the thickness or shape of the reservoir from which the gas will be produced. In a fractured reservoir, such as the Mississippi Formation, gas may travel considerable distance to reach the well and therefore the reservoir may or may not underlie the drilling and spacing units upon which the well is located, and may or may not be uniform in thickness. On the other hand, a volumetric estimate of gas in place makes the assumption that the entire drilling and spacing unit upon which the well is located is underlain with productive formation of equal thickness and ability to produce as that exposed in the wellbore. Put another way, an assumption is made that the same number of feet of pay

found in a particular well will be found throughout the 640-acre unit. Every engineer who testified specifically on the point testified that such an assumption in the Mississippi Formation has no validity and that it is impossible to make a valid volumetric estimate of gas in place in the Mississippi Formation. The conclusions of Appellees' experts that existing wells were not draining the 640-acre units were based on the fact that their volumetric estimates of gas in place beneath the drilling and spacing units showed that there was more gas under the units than indicated by the pressure decline curve of the unit wells. The statements made by Appellees' experts that none of the unit wells, in the gas area, is draining the unit depends upon the correctness of the volumetric estimates, and the evidence establishes that it is impossible to make a valid volumetric calculation of the Mississippi Formation in this area.[3].

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[3] The testimony of Mr. H. for the Appellants concerning the use of volumetric estimates is as follows:

"Q. Did you use the volumetric estimates on the Mississippi Lime wells?

A. I haven't used a volumetric estimate since the mid-1960s and I only tried it once to convince myself that it was not a logical approach.

Q. Why do you find that to be the case?

A. The quality of the logs that are available and the quality of the information to identify porosity and water saturation and net feet of pay is unacceptable for reserve estimates.

Q. Is there any validity at all in your opinion in the results that you might obtain from volumetric estimates in the Mississippi Lime?

A. No.

Q. Do you have an opinion that Mr. Benton's computer calculation of the drainage area?

A. I think the manner in which it was used is erroneous. It's a useful device but primarily what it did was to verify the pressure cumulative analysis that it was — if you examine the results of that and the results of pressure cumulative studies, you will see that there is a very good correlation between the two. And there should be because what it's doing is analyzing the performance of the well to date. But it requires entering an assumption as to the amount of net pay in the well in order to calculate drainage area, and if you don't know net pay, you can't calculate drainage area.

Q. So you are saying that the information that's provided is invalid and the results are invalid?

A. Yes."

Therefore, the Appellees' position that the unit wells would not drain the 640-acre units, which depends upon the comparison of an imperfect volumetric calculation with the reliable pressure decline curve predictions, is not supported by substantial evidence and should fail.

In addition, the testimony reflects that there are only five units in the predominantly gas area which have been penetrated in the Mississippi Formation by more than one wellbore. The evidence reflects that the data obtained from the second well on these five units (less recovery of gas from the second well; no second well has found virgin pressure which is indicative that drainage has occured) shows that the existing gas wells are draining the units.

The remaining units which have more than one well on them are in the oil area. Appellants make no contention that one well would effectively drain 640 acres in the oil area. In the oil area, where the operators had been given permission to drill for additional wells, the unit wells were not draining the oil and this was the reason for the applications to drill additional wells. The fact that a 640-acre unit within the predominantly oil area cannot be effectively drained by one well does not prove that a well on the gas portion of the reservoir will not drain the 640-acre unit.

Moreover, Appellants' expert, Mr. H., prepared an exhibit showing the gas/oil ratios of the cumulative production from the units within the area of interest as of January 1, 1978. These numbers were calculated by taking the cumulative gas production and dividing by the cumulative oil production. In the northern area all of the wells had a gas/oil ratio in excess of 75,000 to 1.

Mr. H. testified that "any well which has produced with a cumulative gas/oil ratio to date as high as 75,000 to 1 has to be called a gas well by anybody's definition." He further testified that in four of the units where there was an additional well that three of the four wells had shown no additional gas reserves would be recovered as a result of drilling the additional well, and these three wells appeared to be marginally economic or possibly uneconomic. He concluded that in the northern predominantly gas area one well would drain 640 acres.

I submit that either an independent review of the evidence or a review of the supportive facts compels the conclusion that there is no substantial evidence that one well in the gas portion of the reservoir will not drain a 640-acre unit, and therefore there is no change in knowledge of conditions. Without a change in knowledge of conditions supported by substantial evidence, the Commission's order is defective and cannot stand.

Thirdly, having decided that there is no substantial evidence of a change of conditions in the predominantly gas area, I cannot agree with the Majority's conclusion that the change of conditions in the oil area warrants de-spacing as opposed to increased density drilling. All parties agree that one well will not drain a 640-acre unit in the predominantly oil area. Therefore, there is substantial evidence of a change of condition in such area and the question then becomes one of deciding which statuatory remedy dealing with this change of condition is supported by substantial evidence. Appellants argue that the Commission's choice of de-spacing is not supported by substantial evidence as such choice permits waste and fails to protect correlative rights. They further argue that such choice is

unconstitutional as it is an unreasonable exercise of the police power which destroys the vested rights of the owners of the oil and gas leases held by unit production and the vested rights of the royalty owners under the tracts upon which the unit well is located, who have shared the production from the unit well with other owners in the 640-acre units for about fifteen years. I agree with Appellants' contentions based on case law, statutory authority, and the record evidence.

Section 87.1(d) provides in part:

> "The Commission shall have jurisdiction upon the filing of a proper application therefor, and and upon notice given as provided in Subsection (a) above, to *decrease the size of the well spacing units or to permit additional wells to be drilled within the established units*, upon proper proof at such hearing that such modification or extension of the order establishing drilling or spacing units will prevent or assist in preventing the various types of waste prohibited by statute or any of said wastes, or will protect or assist in protecting the correlative rights of persons interested in said common source of supply. . . . " (Emphasis added)

The Commission is thus empowered where there is substantial evidence of a change of conditions or knowledge of conditions to either change the size of the existing drilling and spacing units or to permit the drilling of additional wells in existing drilling and spacing units where such action is necessary to prevent waste or protect correlative rights. The fact that the statute gives the Commission a choice of remedies shows recognition by the Legislature that in some instances the proper remedy is a change in spacing, and in other instances intensification of drilling in the existing units is the proper remedy. Having been given a

choice of remedies, it is incumbent upon the Commission to use the remedy which will best prevent waste and protect correlative rights. In *Denver Producing & Refining Co. v. State, 184 P.2d 961, at 964 (1947)*, we stated that: "In striking a balance between conservation of natural resources and protection of correlative rights, the latter is secondary and must yield to a reasonable exercise of the former."

Is the Commission's order necessary to prevent waste? The record evidence reflects that a change in spacing from 640-acre units to 160-acre units results in the drilling of many unnecessary wells in the predominantly gas area covered by the application, thus causing economic waste.[4] It is common knowledge that the price of gas from the 1960s to present has gone from twenty cents to about two dollars per MCF, and a billion cubic feet at two dollars per MCF will pay for a well costing $350,000.00, but it is still economic waste if the well is unnecessary. Appellees' experts testified that there would be more rapid development under de-spacing; however, the fact that there may be faster drilling if the leases are thrown up for grabs does not prove waste. Appellees' experts, in fact, testified that there would be no difference in the recovery of hydrocarbons whether the wells are drilled now or ten years from now. Admittedly, in the predominantly oil area, additional wells are neccessary in order to produce the oil; however, the record indicates that such wells are being applied for and drilled pursuant to orders of the Corporation Commission permitting increased density in the units. The Commission cannot assume that the operators are going to leave oil and gas in the ground

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[4] See Ward v. Corporation Commission, 470 P.2d 993 (1970).

that is economical to produce. However, if an operator fails to apply for increased density, the royalty owner is not without remedy. A royalty owner has the right to request intensification of drilling.[5] If the operator, after the Commission grants permission to drill an additional well does not drill one, the royalty owner may proceed in the District Court in an action for lease cancellation for failure to develop in the manner of a prudent operator. In addition, there is no guarantee that more rapid development would occur through de-spacing. Most de-spacing and increased density orders only *permit* additional wells to be drilled; but economic, reservoir engineering and geological factors are the actual determinants as to whether an operator chooses to drill. In response to arguments from oil and gas operators who coveted some of the acreage included in the 640-acre units, and in response to the plea of some mineral owners that development was proceeding at too slow a pace, the Corporation Commission elected to break up the 640-acre units without any substantial evidence that waste would occur if the 640-acre units were left intact.

Is the order necessary to protect correlative rights? It is my opinion that the order not only is not necessary to protect correlative rights, but destroys and violates the same. Mr. Howard H. Harris, the author of an article entitled "Modification of Corporation Commission Orders Pertaining to a Common Source of Supply", dated May, 1958, Vol. 11, Oklahoma Law Review 125, states at page 130:

"3. Each individual owner has the right:

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[5] Spaeth v. Corporation Commission, 597 P.2d 320 (1979).

A. To have the basic nature of its interests maintained and to have its contractual rights with other persons remain undisturbed, except insofar as abrogation is *absolutely necessary to effect accomplishment of the conservation objective;* . . . " (Emphasis added)

In concluding that smaller units are required to protect correlative rights, the Commission ignored the fact that the establishment of 160-acre units deprived the owners of existing leases, which were held by production of their property, and awarded them to the parties who had taken top leases in expectation that the Commission might be persuaded to enter such an order. The 640-acre unit wells have been in existence since the early 1960s and, but for the spacing orders, the owner or owners of the minerals under the land upon which the unit well is located would have received 100% of the royalty from the well. Because of the spacing orders, such owner has shared the royalty proceeds with the other mineral owners in the 640-acre unit. If the order of the Commission stands, such owner or owners will find that they now own 100% of the royalty attributable to the *partially* depleted unit well, and have been stripped of any participation in the production of any additional well or wells that may be drilled in the governmental section that formerly comprised the 640-acre unit. That parties who have shared their royalty under the compulsion of the statutory unit should be deprived of any right to share in the production from any additional wells that might be drilled in the unit acreage is a gross inequity and a violation of their vested rights. Thus, there is no substantial evidence that the order is necessary to protect correlative rights, but, in fact, the order violates those rights.

Indeed, the order entered unnecessarily takes the Appellants' property for the benefit of others and is an unreasonable extension of the police power in the prevention of waste and thereby violates the constitutional rights of Appellants. In *Oklahoma Natural Gas Co. v. Choctaw Gas Co., 236 P. 2d 970 (1951)*, we stated that:

> "Although private rights yield to the exercise of police power, they are not to be totally annihilated thereby, or interfered with to a greater extent than reasonably necessary, taking into consideration the real object to be accomplished."

Also, in *Cabot Carbon Co. v. Phillips Petroleum Co., 287 P. 2d 675 (1975)*, we stated at page 679 that:

> "The Corporation Commission's power to regulate the taking from the reservoir to prevent waste and protect correlative rights, even to fixing the price of production so taken, if necessary to accomplish these conservation purposes, does not extend to overturning private contracts where not necessary for such accomplishment."

In *Skinner v. State, 115 P. 2d 123 (1941), at page 126*, this Court said:

> " 'Due process' has a dual significance, as it pertains to procedure and substantive law. As to procedure it means 'notice and an opportunity to be heard and defend in an orderly proceeding adapted to the nature of the case before a competent, impartial tribunal having jurisdiction of the cause. . . . In substantive law, due process may be characterized as a standard of reasonableness, and as such it is a limitation upon the exercise of the police power."

There was no substantial evidence that it was necessary or a reasonable exercise of the police power to decrease the size of the drilling and spacing units in order to prevent waste, and, by doing so, thereby terminate vested leasehold rights of lessees and the rights of certain royalty owners in their just share of production, instead of ordering increased well density. The action of the Commission was therefore arbitrary, invalid and unconstitutional in violation of Section 23 of Article II of the Constitution of the State of Oklahoma and deprives them of their property without due process of law in violation of Article II, Section 7, of the Constitution of the State of Oklahoma and in violation of the Fourteenth Amendment to the Constitution of the United States of America.

Further, I cannot agree with the Majority Opinion's conclusion when it states there is substantial evidence to support the Commission's choice of a remedy to decrease because "past density applications by owners in the unit have not uniformly developed the common source, and have not been carried out with dispatch." There is no evidence in the record to support this conclusion.

With respect to the conclusion that past density applications have not resulted in the uniform development of the common source of supply, it should be noted that applications to increase density are submitted on a unit-by-unit basis, the obvious consequence of which is that there is not the same number of wells on each unit. Obviously, as stated before, in the gas area only one well is required, while on the oil portion of the area up to four wells may be required.

With respect to the conclusion that "past density applications have not been carried out with dispatch, the record is devoid of evidence to support this conclusion, except for the case of *Harper v. Hayes, 431 P. 2d 387 (1964)*, and, in fact, evidence in that case clearly contradicts such a conclusion. In every instance, except one, where an order was entered authorizing an additional well, a well was drilled. Only in *Harper* had the Commission entered an order permitting the drilling of additional wells in a 640-acre unit, where the permitted number of additional wells, at the time of the hearing in this case, had not been drilled. This was in Section 26-22N-8W. The initial well drilled in said section was an oil well, and Harper obtained permission to drill three more wells in the 640-acre unit on the theory that three more oil wells would result. The additional second well was a gas well. The two additional wells authorized were not drilled because it appeared that these would also be gas wells and therefore would not be necessary to drain the unit. Further, Appellees in their application did not request that Section 26 be de-spaced, although the evidence reflects that it is part of the same common course of supply. Thus, the sole instance of failure to drill additional wells applied for occurred in a 640-acre unit not covered by the application in this cause.

Fourthly, I am in agreement with Appellants' position that both in the hearings below and in this appeal that Appellee's application for de-spacing was defective because it failed to de-space the entire common source of supply. Appellants' position in this regard was based upon 52 O.S. Supp. 1978, § 87.1(a), which provides in pertinent part that the Commission:

"had the power to establish well spacing and drilling units of specified and approximately uniform size and shape covering any common source of supply, or perspective common source of supply, of oil or gas within the State of Oklahoma; . . . or may establish, reestablish, or reform well spacing and drilling units of different sizes and shapes when the Commission determines that a common source of supply contains predominantly oil underlying an area or areas and contains predominantly gas underlying a different area or areas; provided further that the units in the predominantly oil area or areas shall be of approximately uniform size and shape, and the units in the predominantly gas area or areas shall be of approximately uniform size and shape, except that the units in the gas area or areas may be of nonuniform size and shape when they adjoin the units in the oil area or areas; . . . "

The record discloses that Appellees requested the Commission to establish smaller drilling and spacing units in only a portion of the subject common source of supply. Dismissals of various units occurred during the course of the proceeding. Relief requested by the Appellees was clearly contrary to the provisions of Section 87.1(a) unless all the common source of supply was involved, or unless there is a combination reservoir when the gas units and oil units are separately defined. The order appealed did not establish separate gas units and separate oil units.

Throughout the hearing and on appeal, Appellants urged an alternative position. They urged that the proper remedy in this case was additional well authorization. Additional well authorization is an alternative to respacing and is provided for in Section 87.1(a) as follows:

> "... Provided that the Commission may authorize the drilling of an additional well or wells on *any* spacing and drilling unit or units or any portion or portions thereof, *or* may establish, re-establish, or reform well spacing and drilling units...." (Emphasis added)

Thus, the statute *permits* additional well authorization in *less* than all of the units in a common source of supply, but *requires* all of the common source of supply to be involved in respacing.

The Majority Opinion is mistaken in its contention that Appellants urged a unit-by-unit consideration of the application for purposes of de-spacing, as well as for the purposes of additional well authorization (increased density). Because of this mistaken assumption, the Majority states that: "It is inappropriate to now allow reversal of the Commission's order on grounds which directly conflict with the parties' position below." Although Appellants never requested de-spacing, it was their contention that if de-spacing was undertaken, it would have to encompass the entire common source of supply. What Appellants did request was increased density which of necessity would be on a unit-by-unit basis.

Since 52 O.S. Supp. 1978, § 87.1(a), requires all of the common source of supply to be involved in de-spacing, the Commission's order is defective, and the order's failure to deal with the entire common source of supply is another reason for its reversal by this Court.

Lastly, although I do not disagree with the Majority's holding that the Commission lacked personal jurisdiction over Union Oil of California, I disagree with the consequential results reached by the Majority when

they conclude that no part of the Corporation Commission's order "is valid insofar as it affects the rights and interests of Union Oil of California, and is reversed insofar as it attempts to adjudicate the rights of Union Oil of California." The result of the Majority Opinion is to effectively change each 640-acre drilling and spacing unit in which Union has an interest into four 160-acre drilling and spacing units *as to every one of the 640-acre units except Union.* The effects and consequences are chaotic, leaving undetermined and uncertain the rights and liabilities of the parties in each such 160-acre unit as against Union, whose interest is still fixed on the basis of a 640-acre unit. Even if Union's interest is de minimus, the consequences are the same. For example, if Union owns an overriding royalty interest covering only one non-producing 160-acre unit, does the lessee on whose leasehold the former 640-acre unit well was located still have to continue to account to Union on the basis of a 640-acre unit? If Union owns a lease covering only one non-producing 160-acre unit, how can it terminate as to the lessor-royalty owners where the primary term has expired, but not terminate as to Union's lessee interest because the lease was within the former producing 640-acre unit? These disruptive consequences are yet another reason why the Commission's order cannot stand and should be reversed.

I am authorized to state that Justice Hodges and Justice Simms join me in this dissent.

BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA

APPLICANT: HARVEY W. DIERKSEN, ET AL.

IN THE MATTER OF ESTABLISHING DRILLING AND SPACING UNITS FOR THE MISSISSIPPIAN IN SECTIONS 2, 5 THRU 9, T21N, R8W; SECTIONS 11 THRU 14, 23 THRU 26, 35 and 36, T22N, R9W; SECTIONS 30 THRU 34, T23N, R7W; SECTIONS 31 THRU 36, T23N, R8W; SECTIONS 1 THRU 25, 27 THRU 34, AND SECTION 36, T22N, R8W; SECTIONS 3 THRU 25 and 27 THRU 34, T22N, R7W; ALL IN MAJOR AND GARFIELD COUNTIES, OKLAHOMA, AND IN THE MATTER OF VACATING ORDER NO. 49133 AS LAST AMENDED BY ORDER NO. 140746 (SO. 2933) INSOFAR AS SAID ORDERS COVER THE MISSISSIPPIAN AND SAID LANDS AND VACATING ORDER NO. 50337, AS LAST AMENDED BY ORDER NO. 138728 (SO. 3083) INSOFAR AS SAID ORDERS COVER THE MISSISSIPPIAN AND SAID LANDS.	) CAUSE CD NO.)) 54890)) ORDER NO.)) 148243)))))))))))))))))

REPORT OF THE COMMISSION

The above entitled and numbered Cause was first set for hearing before the Corporation Commission of

Oklahoma on July 10, 1978, at 10:00 a.m., in its Courtroom, Jim Thorpe Building, Oklahoma City, Oklahoma, but was continued from time to time and heard on various definite dates pursuant to orders herein; sitting included Rex Privett, Chairman, Hamp Baker, Vice Chairman, Jan Eric Cartwright, Commissioner.

Barth P. Walker and Donald L. Worthington, Attorneys, appeared for the Applicants; James R. Cox, Attorney, appeared for various mineral owners; Patricia A. Moore, Attorney, appeared for Sun Oil Company; Guy E. Taylor, Attorney, appeared for Peninsula Resources Corporation; Duncan W. Holt, Jr., Attorney, appeared for Atlantic Richfield Company; Robert A. Miller, Attorney, appeared for Texas American Oil Corporation and Texas Oil & Gas Corp.; David G. Probst, Attorney, appeared for Harper Oil Company; C. Harold Thweatt, Attorney, appeared for Union Texas Petroleum Company, Champlin Petroleum Company and Eason Oil Company; Gordon Brown, Attorney, appeared for Henry Gungoll and Associates, Carl E. Gungoll, L.O. Ward, Ladd Petroleum Company, Woods Petroleum Company, Mack Oil Company, Odessa Natural Gas Company, and Okmar Oil Company; John R. Robertson, Jr., Attorney, appeared for Continental Oil Company, Viersen & Cochran, Creslenn Oil Company and Preston H. Alexander; Wyn Dee Baker, Attorney, appeared for Amerada Hess Corporation; William Scheurich and John A. Gaberino, Jr., Attorneys, appeared for Oklahoma Natural Gas Company; Russell Thompson, Attorney, appeared for Singer-Fleischaker Oil Operating Co., Inc. and Harper Oil Company; H. B. Watson, Jr., Attorney, entered a special appearance solely for the purpose of questioning the jurisdiction of the Commission for Tenneco Oil Company and Union Oil Company of California; Bryce Hodgden, Attorney,

appeared for Walter and Norma Hodgden; and Harvey Cody, Conservation Attorney, appeared for the Commission.

The Commission proceeded to hear said Cause and having received the evidence, oral, written, and exhibits, statements of interested parties, and arguments of counsel, all of which have been considered, the Commission therefore finds as follows:

FINDINGS

1. That this is the Application of Harvey W. Dierksen, et al, owners of the normal 1 / 8th royalty interest for an Order establishing proper drilling and spacing units for the Mississippian in Sections 2, 5 thru 9, T21N, R8W; Sections 11 thru 14, 23 thru 26, 35 and 36, T22N, R9W; Sections 30 thru 34, T23N, R7W; Sections 31 thru 36, T23N, R8W; Sections 1 thru 25, 27 thru 34, and Section 36, T22N, R8W; Sections 3 thru 25, and 27 thru 34, T22N, R7W; all in Major and Garfield Counties, Oklahoma, and in the matter of vacating Order No. 49133 as last amended by Order No. 140746 (So. 2933) insofar as said Orders cover the Mississippian and said lands and vacating Order No. 50337, as last amended by Order No. 138728 (So. 3083) insofar as said Orders cover the Mississippian and said lands.

2. That the Commission has jurisdiction of the Application filed herein and notice of the hearing has been given as required by law and rules of the Commission; that the Application herein is limited to the Mississippian common source of supply and all orders, references, and land setout herein relate to the Mississippian only.

3. That the area covered by the Application covers part of the area within the purview of Order No. 49133, as amended, and within the purview of Order No. 50337, as amended; that a proper perspective of the relief requested by the Application, coupled with protestants' contention that such relief should not be granted portends the necessity for a complete review of the Commission's administration and orders heretofore issued with respect thereto of the Mississippian within the areas of such Orders;

(a) Order No. 49133 and the series of Orders thereunder:

1. That the first drilling and spacing unit order in the area covered by the Application was issued on June 22, 1962, when Order No. 49133 established 640-acre drilling and spacing units for the Mississippian as a gas and gas condensate common source of supply in an area covering forty (40) governmental sections; namely, Sections 25 thru 36, T22N, R9W, Sections 1 thru 4, T21N, R9W, Sections 25 thru 36, T22N, R8W, and Sections 1 thru 12, T21N, R8W; that a portion of this area is only one mile south of the nine (9) section area first covered by Order No. 50337, which was issued only about five (5) months later, reviewed in paragraph 3(b) below; that Order No. 49133 in part finds:

"3. . . . there have been two wells completed . . . (and) a new and separate common source of supply of gas and gas condensate has been found to exist. . . .

"4. . . . that one well will adequately drain the gas and gas condensate from said forma-

tion underlying 640-acres and that it is unnecessary to drill wells on a closer pattern";

that drilling development, and production since the issuance of Order No. 50337, reviewed below, and Order No. 49133 have shown, in fact, that the Mississippian dips generally to the southwest and consists of a fractured (fractures run generally east and west) continuous geologic limestone interval, about 600 feet thick throughout the whole of the areas covered by Order No. 49133, as amended, and Order No. 50337, as amended; that the Mississippian is heterogenous lithologically and has highly variable porosity, permeability, water and hydrocarbon saturations, and pressure characteristics; that there is and has been continuous and contiguous development with producing wells throughout said areas so that the Mississippian is now known to be and is, in fact, a common source of supply throughout the areas covered by the Orders No. 49133 and No. 50337 mentioned, both as amended.

2. That the first amending Order to Order No. 49133 is Order No. 53477, dated December 3, 1963, which is about five (5) months after Order No. 49133 was issued and about three (3) weeks after Order No. 50337, reviewed below, was issued; Order No 53477 found that a well had been drilled in the SW/4 of Section 26, T22N, R8W, which had encountered oil in the Mississippian and the geologist witness then testified that in order "to efficiently and and effectively drain such section that applicant should be authorized to drill and complete three addi-

tional wells . . . in said section . . . "; those wells were authorized but, as of date of hearing in this Cause, about 15 years later, Harper Oil Company, the Operator of said Section 26, has drilled and is producing only two (2) of the additionally authorized wells, one of which was not drilled until 1978; that by Order No. 53828, dated January 8, 1964, an additional well was authorized for Harper Oil Company in Section 35, T22N, R8W, when the initial well in said Section 35, a gas well, was thought to be up-dip from a probable oil bearing portion of the Mississippian; that Order No. 54702, dated April 1, 1964, extended Order No. 49133 to include Sections 21 thru 24, T22N, R8W, and Sections 19, 30 and 31, T22N, R7W, making this area contiguous to that covered by Order No. 50337, issued November 15, 1962, and reviewed below, said Order No. 54702 finds:

> "5. . . . that the Mississippian formation covered by this Order contains a combination reservoir, some wells producing oil and some wells producing gas . . .";

3. That Order No. 55060, dated May 8, 1964, extended Order No. 49133 to include Sections 5 thru 36, T21N, R9W, Sections 1 thru 5 and 8 thru 12, T20N, R9W, after vacating 80-acre units as to some of said lands and in so doing found that, even though the wells in question produced both oil and gas, the wells should be classified as gas wells with 640-acre drilling and spacing units established therefor and found that

> "4. . . . Some evidence of lease expiration entered into this hearing, and it should be

noted from the outset that the Commission has no authority to consider leasing matters and such evidence has no place in a spacing application . . . ";

that Order No. 55756, dated July 14, 1964, authorized an additional well in Section 10, T21N, R8W, finding that "one well will not adequately drain the recoverable oil from said formation"; that Order No. 56259, dated September 15, 1964, authorized an additional well in Section 12, T21N, R8W, making a comparable finding; that Order No. 56600, October 21, 1964, authorized a second additional well in Section 35, T22N, R8W, finding that "one well will not drain" the unit;

4. That Order No. 56704, dated October 21, 1964, extended Order No. 49133 to include Sections 2 thru 11, 14 thru 20, T22N, R8W, finding that there were wells in the area and at that time showing the existence of oil production about two (2) miles to the north of the area which

"7. . . . create some doubt as to what the nature of the hydrocarbons will be when a well is drilled in the proposed area . . . ";

5. That Order No. 57124, dated December 18, 1964, extended Order No. 49133 to include Sections 4, 5, and 6, T21N, R7W, and Sections 20, 21, 28, 29 and 33, T22N, R7W; that Order No. 57805, dated February 26, 1965 authorized an additional well in Section 3, T21N, R8W, finding that

"4. . . . the Mississippi Lime reservoir here in question is erratic insofar as what kind of

hydrocarbons will be produced under a given area . . . ";

6. That Order No. 57891, dated March 12, 1965, excluded the Harper-Hayes unit No. 1 Well from the purview of Order No. 49133, reviewed above, that well was authorized along with two other additional wells to be drilled on Section 26, T22N, R8W, and declared that even though the well is producing from the Mississippian that it is not affected by Order No. 49133 which was declared to remain in effect as to the remainder of the Mississippian underlying said Section 26; the Order was overturned in *The Harper Oil Company v. Hayes*, 341 P.2d 387.

7. That Order No. 58106, dated March 31, 1965, extended Order No. 49133 to include Sections 14, 15, 22, 23, T22N, R7W; that Order No. 58330, dated April 21, 1965, authorized an additional well in Section 4, T21N, R8W; that Order No. 58407, dated April 28, 1965, excludes Section 8, T20N, R9W from the purview of Order No. 49133, as amended, finding that said Section "is predominantly underlain by oil" and established 80-acre units therefor; that Order No. 59124, dated June 4, 1965, amended Order No. 49133 to include Section 16, T20N, R9W; that Order No. 59138, dated June 11, 1965, authorized an additional well in Section 11, T21N, R8W, finding that a combination reservoir exists and "one well will not adequately drain the oil from said formation"; that Order No. 59139, dated June 24, 1965, authorized an additional well in Secion 25, T22N, R8W, finding that it is "difficult to determine whether a well, drilled to the Mis-

sissippi Lime in this area will be an oil well or a gas well"; this well has not been drilled;

8. That Order No. 59630, dated July 23, 1965, No. 59907, dated September 1, 1965, and No. 60530, dated November 2, 1965, extend Order No. 49133 to include more land while Order No. 61007, dated December 14, 1965, excludes Section 4, T21N, R7W, from purview of Order No. 57124 and established 80-acre units finding that "one well will not adequately drain the 640-acre unit"; that Order No 62048, dated March 25, 1966, No 62854, dated June 16, 1966, and Order No. 62988, dated June 17, 1966, extend Order No. 49133 to include additional lands; that Order No. 63177, dated July 18, 1966, exludes the SE/4 Section 5, T21N, R7W, from Order No. 49133 and establishes 80-acre units in said SE/4 and a 480-acre unit with the remainder of the Section finding the SE/4 as predominantly oil;

9. That Order No. 64052, dated September 15, 1966, excludes Section 21, T20N, R9W, from purview of Order No. 60530 because Section 21 is productive of oil and gas and established 80-acre units in said Section; that Order No. 64361, dated November 29, 1966, extends Order No. 49133 to include Section 3, T21N, R7W, and vacated 80-acre units therein; that by Order No. 64959, dated February 7, 1967, Field Rules relating to the production of gas were established; that Order No. 66581, dated July 26, 1967, No. 67192, dated October 11, 1967, and No. 67881, dated December 29, 1967, extend Order No. 49133 to include other lands; that Order No. 68619, dated March 27, 1968, authorized an addi-

tional well in Section 17, T22N, R6W, because the first well encountered a "porous section in the Mississippian formation . . . not encountered in other wells in surrounding sections . . . ";

10. That Order No. 69309, dated June 13, 1968, extends Order No. 49133 to include other land and established a 370-acre unit with respect to the N/2 of Section 2, T21N, R7W; that Order No. 69286, dated June 14, 1968, authorized an additional well in Section 10, T20N, R9W; that Order No. 69523, dated July 10, 1968, extends Order No. 49133 to include Section 22, T22N, R9W; that Order No. 70487, dated November 1, 1968, vacates Order No 49133 as to a Section and establishes 80-acre units in the E/2 thereof and a 320-acre unit in the W/2 thereof; that Order No. 70504, dated November 26, 1968, establishes a 480-acre gas unit in Section 14, T22N, R6W; that Orders No. 70511, dated December 3, 1968, No. 73967, dated May 13, 1969, and No. 74814, dated June 6, 1969, No. 75566, dated July 15, 1969, No. 75884, dated October 23, 1969, No. 80077, dated April 29, 1970, No. 81563, dated August 12, 1970, No. 82369, dated October 26, 1970, No. 83179, dated December 30, 1970, all delete lands from the purview of Order No. 49133 so as to establish 80-acre units for such lands finding, after development in the area, and on the lands, that said lands were predominantly oil and that additional wells were necessary.

11. That Order No. 84056, dated March 10, 1971, and No. 85435, dated June 17, 1971, extended Order No 49133 to include other lands; that Order No. 91255 excludes Sections 21, 22, and 27 through 30, T21N, R9W, and established 80-acre units therefor after wells drilled in the area indicate oil production; that Order No. 97153, dated April 24, 1973, Order No. 102152, dated January 2, 1974, and Order No. 102670, dated January 17, 1974, authorize, respectively, additional wells in Section 4, T21N, R8W, Sections 22 and 23, T22N, R6W, Sections 15, 21, and 24, T22N, R6W, finding that the additional wells are necessary to drain the Sections; that Order No. 106174, dated June 27, 1974, authorizes two additional wells in each of Sections 15, 21, 22, 23, and 24, T22N, R6W, finding that after wells had been drilled and after additional study that to substantially drain the Mississippi Lime common source of supply of its economically recoverable hydrocarbons four (4) wells to each governmental section are needed; that Order No. 106304, dated September 3, 1974, authorizes two additional wells in Section 20, T22N, R6W, after finding that one well had been drilled in said Section 20 and that it is now evident that said well has a "very limited drainage area," that said well "will not sufficiently drain and recover the produceable liquid hydrocarbons," that "the additional wells will encounter different fracture systems" and will drain areas that would "not be drained by the original well," and that a change of condition is shown to exist "from the production of the original well and the limited area of drainage of said well";

12. That Order No. 106305, dated September 3, 1974, No. 106306, dated September 3, 1974, No. 106256, dated September 3, 1974, permit additional wells in Sections 19, 16, and 17, T22N, R6W, respectively, making substantially the same findings as are quoted, next above; that Order No. 111740, dated March 21, 1975, excludes Section 27, T20N, R9W, from Order No. 49133, and establishes 80-acre units, predominantly oil; that Order No. 112773, dated May 15, 1975 authorized an additional well in Section 17, T22N, R6W; that Order No. 115945, dated October 17, 1975, authorized an additional well in Section 6, T21N, R7W; that Order No. 115871, dated October 14, 1975, excludes Section 11, T20N, R9W, from Order No. 49133 and establishes 80-acre units predominantly oil; that Order No. 116217, dated October 28, 1975, authorizes an additional well in Section 10, T20N, R9W, to fully develop the Section; that Order No. 116467, dated November 10, 1975, vacates Order No. 49133 as to Section 20, T20N, R9W, and establishes a 320-acre gas unit and 80-acre oil units in said Section; that Order No. 115944, dated October 17, 1975, authorizes an additional well in Section 33, T22N, R7W; that Order No. 118351, dated January 21, 1976, authorizes two additional wells in Sections 33 and 34, T21N, R9W; that Order No. 119955, dated March 17, 1976, authorized two additional wells in Section 12, T21N, R8W, where a combination reservoir is involved to prevent the loss of hydrocarbons;

13. That Order No. 120410, dated April 5, 1976, vacates Order No. 49133 after wells are drilled

in the area and creates no units; that Orders No. 120465, dated April 6, 1975, No. 120556, dated April 12, 1976, No. 120958, dated April 27, 1976, and No. 121314, dated May 12, 1976, permit additional wells, respectively, in Section 5, T21N, R7W, Section 32, T22N, R9W, and Section 1, T21N, R8W, where additional wells are needed to adequately and effectively drain the recoverable gas and gas condensate from the Mississipian; that Order No. 121486, dated May 19, 1976, extended Order No. 49133 to include Section 18, T21N, R8W; that Order No. 123489, dated August 9, 1976, excludes Section 13, T21N, R9W, from Order No. 55060 and establishes 80-acre units while Order No. 124290, dated September 17, 1976, excludes Section 10, T20N, R9W, from Order No. 49133, and established 160-acre units after wells in the area showed that the wells were not draining 640 acres; that Order No. 125048, dated October 18, 1976, No. 124768, dated October 6, 1976, and Order No. 124865, dated October 12, 1976, respectively , authorized additional wells in Section 9, T20N, R9W, and Sections 5 and 6, T21N, R7W, said additional wells being necessary to effectively drain the Sections; that Order No. 125542, dated November 4, 1976, extends Order No. 49133, to include Section 24, T20N, R9W; that Order No. 126037, dated November 23, 1976, establishes two 320-acre units;

14. That Orders No. 126541, dated December 14, 1976, No. 128875, dated March 10, 1977, No. 129630, dated April 11, 1977, No. 129636, dated April 11, 1977, No. 129695, dated April 13, 1977, Order No. 130051, dated April 25, 1977, No.

130946, dated May 25, 1977, No. 131119, dated June 2, 1977, No. 131153, dated June 2, 1977, No. 131340, dated June 9, 1977, respectively, authorized additional wells in Section 34, T22N, R7W, Section 1, T21N, R8W, Section 10, T21N, R8W, Section 6, T21N, R7W, Section 11, T21N, R8W, Sections 33 and 34, T21N, R9W, Section 5, T21N, R7W, Section 27, T22N, R8W, Section 36, T22N, R7W, and Section 3, T21N, R7W, all wells being necessary to drain the recoverable hydrocarbons; that Order No. 131859, dated June 27, 1977, excludes Section 22, T22N, R9W, from Order No. 69523 and establishes 80-acre units after a well drilled thereon indicates Section 22 primarily underlain by oil; that Order No. 132361, dated July 14, 1977, extends Order No. 124290 to include SE/4 Section 4, T20N, R9W, as a 160-acre unit; that Orders No. 133155, dated August 4, 1977, No. 133272, dated August 10, 1977, and No. 132199, dated July 6, 1977, respectively authorizes additional wells in Section 30, T22N, R7W, Section 1, T21N, R8W, and Section 5, T21N, R7W, all to effectively drain the Sections involved; that Order No. 133892, dated September 7, 1977, excludes Section 12, T21N, R9W, from Order No. 49133, after a well was drilled thereon which produced predominantly oil and establishes 80-acre units;

15. That Order No. 134192, dated September 21, 1977, excludes Sections 25 and 26, T20N, R9W, from Orders No. 76685 and No. 85435 respectively and establishes 160-acre units therefor; that Orders No. 134466, dated September 29, 1977,

No. 134547, dated October 3, 1977, and No. 134816, dated October 17, 1977, authorizes additional wells, respectively, in Section 10, T22N, R8W, Section 10, T21N, R8W, and Section 11, T21N, R8W, all necessary to maximize recovery from said Sections; that Order No. 136783, dated December 23, 1977, extends Order No. 49133 to include Section 13, T22N, R6W; that Order No. 136620, dated December 16, 1977 excludes Section 23, T20N, R9W, from Order No. 85435, after wells were drilled, and establishes 160-acre units therefor because recoveries indicate that only approximately 160 acres will be drained from one well and that

> "... a change of condition in the knowledge of the area has occurred ... in that it now appears that while said formations may be primarily productive of gas, that large amounts of condensate will be produced and that one well will only drain the recoverable hydrocarbons from under a 160-acre unit";

16. That Order No. 137690, dated February 27, 1978, includes NW/4 Section 11, T21N, R9W, within Order No. 53277 as 80-acre units; that Orders No. 138853, dated March 8, 1978, No. 139023, dated March 14, 1978, No. 139514, dated March 29, 1978, No. 140576, dated May 1, 1978, No. 140746, dated May 8, 1978, No. 142873, dated July 7, 1978, No. 142874, dated July 7, 1978, No. 146125, dated October 2, 1978, and No. 146566, dated November 1, 1978, authorize additional wells respectively, Section 36, T22N, R7W, Section 35, T22N, R7W, Section 3, T21N, R8W, Section 32, T22N, R7W, Section 31, T22N, R7W, Sec-

tion 11, T21N, R8W, Section 11, T21N, R8W, Section 3, T21N, R8W, and Section 32, T22N, R7W, so as to adequately drain the Sections; that Order No. 145467, dated September 28, 1978, excludes Section 26, T21N, R9W, from Order No. 49133 and establishes 80-acre units therefor.

(b) Order No. 50337 and the series of Orders thereunder:

1. That about five (5) months after Order No. 49133, reviewed above, Order No. 50337, dated November 15, 1962, established 640-acre drilling and spacing units for the Mississippian as a gas common source of supply in nine (9) governmental sections; namely Sections 5, 6, 7, 8, 17, and 18, T22N, R7W, and Sections 1, 12 and 13, T22N, R8W; that Order finds:

> "3. . . . that heretofore one well has been drilled within the area . . . and that by the drilling thereof a new and separate common source of supply of oil and gas has been found to exist in the Mississippian Sand . . .
>
> "4. . . . that one well will adequately drain the recoverable gas and gas condensate from said formation underlying 640-acres and that it is unecessary to drill wells on a closer pattern.";

2. That is is now known that the Mississippian is in fact one common source of supply within the combined areas of Order No. 49133, as amended, and Order No. 50337 as amended; that Order No. 52215, dated June 25, 1963, reiterates the provisions of Order No. 50337; that

Order No. 57897, dated March 10, 1965, found that "subsequent development now indicates that said common source of supply extends beyond the area" of Order No. 52215 and included Sections 35 and 36, T23N, R8W; that Order No. 60705, dated November 18, 1965, extended Order No. 52215 to include Sections 1, 2, 3 and 4, T22N, R7W and Sections 35 and 36, T23N, R7W; that Order No. 61728, dated February 22, 1966, extended Order No. 52215 to include Sections 27, 28, 33 and 34, T23N, R8W; that Order No. 62287, dated April 15, 1966, extended Order No. 50337, to include Section 10, T22N, R7W; that Order No. 63750, dated September 23, 1966, extended Order No. 50337 to include Sections 31, 32 and 33, T23N, R7W; that Order No. 63767, dated September 23, 1966, extended Order No. 52215 to include Section 9, T22N, R7W; that Order No. 64129, dated November 1, 1966, deleted Section 36, T23N, R7W, from the purview of Order No. 50337 and established 80-acre drilling and spacing units for the Mississippi Lime underlying said Section 36 after a well had been drilled in the NE/4 SE/4 of said Section 36 and revealed Section 36 to be "underlain by oil"; that Order No. 64719 dated January 6, 1967, extended Order No. 50337 to include Section 27, T23N, R7W;

3. That by Order No. 64959, dated February 7, 1967, Field Rules regulating the production of gas from the Mississippi Lime throughout the areas covered by Order No. 49133, as amended, by Order No. 50337, as amended, by Order No. 53277, as amended, by Order No. 56922, as

amended and by Order No. 58120, as amended, (four series of Mississippian Orders) and in said Order No. 64959 field rules were found to be necessary to provide "an equal opportunity" for owners of interests in the various areas covered by said Order, "to recover their producible gas" and to "accomplish all lawful and desirable results in the matter of allocating gas to the individual wells throughout the extent and life of *the common source of supply.*"

4. That subsequent to Order No. 64959, Order No. 65583, dated April 14, 1967, extended Order No. 50337 to include Section 34, T23N, R7W; that Order No. 65721, dated April 25, 1967, deleted Section 1, T22N, R7W from the purview of Order No. 50337, established 80-acre units for the Mississipian in said Section 1, after finding that the "development and trend of development now indicates" that the Mississippian Formation "will be predominantly productive of oil and gas"; that Order No. 68261, dated February 27, 1968, deleted Section 2, T22N, R7W, from the purview of Order No. 50337, established 80-acre units for the Mississippi Lime in said Section 2 after finding that "Section 2 is predominantly underlain by oil"; that Order No. 69812 deleted Section 22, T23N, R7W, from the purview of Order No. 64719 which had established 80-acre oil and gas units in said Section 22 and brought said Section 22 within the purview of Order No. 64719 as a 640-acre unit because the gas-oil ratio of a well in said Section 22 had increased to in excess of "25,000 cubic feet per barrel of oil"; that Order No. 80926, dated June 30, 1970, extended Order

No. 52215 to include Sections 19, 20, 21, 28, 29, and 30, T23N, R7W, and Sections 23 thru 26, T23N, R8W, finding "that one well will adequately and efficiently drain.... all of the gas and gas condensate underlying a 640-acre tract of land"; that Order No. 114625, dated August 6, 1975 vacated the Field Rules Order, referred to above as Order No. 64959, finding that there were 101 wells then producing and that the Field Rules were no longer applicable; that Order No. 138728, dated March 2, 1978, extended Order No. 50337 to include Sections 31 and 32, T23N, R8W.

5. That the review of Order No. 49133 and the amended Order thereto and of Order No. 50337 and the amending Order thereto show

i. that, when Order No. 49133, where only two wells had been drilled within the area covered by Order No. 49133 when it was issued, and when Order No. 50337, where only one well had been drilled within the area covered by Order No. 50337 was issued, the 640-acre drilling and spacing units were first established because the Mississippian was indicated to be gas and gas condensate common sources of supply within the respective areas and it was then concluded that one well could be expected effectively and efficiently to drain the recoverable gas and gas condensate from 640 acres;

ii. that, while those initial Orders apparently treated their respective areas as separate from each other, the areas covered by said Orders, as amended, are in fact in the Mississippian, a common source of supply;

iii. that, at the time of the issuance of Orders No. 19133, and No. 50337, it could not then reasonably be foreseen that both oil and gas would be found in the areas, and that the numerous exceptions, which have been granted, to well density and to drilling and spacing unit size would be necessary to prevent waste and protect correlative rights;

iv. that there has been substantial change of conditions and knowledge of conditions in the Mississippian as to the hydrocarbon saturation, i.e., whether oil, gas, or condensate will be found, the effective drainage radius of a well, the nature and characteristics of the Mississippian, and of those features thereof such as porosity, permeability, water saturation, hydrocarbon saturation, effective pay thickness, and lithology;

v. that there has been a substantial change in the orderly development of the areas, which was contemplated by the issuance of Orders No. 49133 and No. 50337 to be only one (1) well per 640-acre unit, by the necessary granting of numerous exceptions to well density and drilling and spacing unit size;

vi. that the conditions and knowledge of conditions now prevalent with respect to the development of the Mississippian heretofore and with respect to the production of wells already drilled within the area covered by the Application area, in conjunction with the drilling and production of wells which will be required in the future clearly demon-

strate that a more orderly administration of the area, other than that which has occurred on a 640-unit basis, is necessary to assure that those wells reasonably required to prevent waste and protect correlative rights can or will be drilled.

(c) The Evidence:

1. Applicants' Exhibits:

Exhibit No. 30 — is a plat which shows, colored in red, the area covered by this Application herein; Sections 26 and 35, T22N, R8W are shown as not covered by said Application because three wells have already been drilled in each Section; the area covered by Order No. 49133, as amended, is outlined in a blue-red line and the area covered by Order No. 50337 and 52215, both as amended, is outlined in green-red line; all order numbers of orders amending the basic Order No. 49133 and 50337 are also shown.

Exhibit No. 31 — is a plat which shows, with respect to the area covered by Order No. 49133, as amended, and Order No. 50337, as amended, order numbers and exceptions to the basic 640-acre drilling and spacing units; some of said exception orders, as shown, vacate 640-acre units and establish 80-acre, 160-acre or 320-acre units; other of such orders authorize additional wells on 640-acre units or other sized units.

Exhibit No. 32 — is a plat which shows various drilling and spacing units as authorized

in the area covered by said Exhibit and the order numbers therefor.

Exhibit No. 33 — is a plat which shows the area, colored in blue, covered by the Application herein and all wells which produced or are producing from the Mississippian in said area; the data, where available, which is shown opposite each well symbol includes:

(1) Completion Date-Month-Year/Total Depth
(2) Perforations: Number (highest-lowest)
(3) Initial Potential: gas MMCFD/Oil BPD flowing pressure PSIG (OFP indicates gas and oil (condensate) are calculated openflow potential values)
(4) Accumulated production: 1-1-78 — Gas in BCF/Oil in MBBLS
(5) Average producing rate last six (6) months of 1977; Gas MMCF per month/ oil BBLS per month
(6) Mississippi (Meramec-Osage) interval: Gross feet/net feet
(7) Average log porosity: percent (%);

that, on cross examination, the wells where there was no production data presented were marked with a red "zero" and those wells where there was no log data presented were marked with a red check; that all of the wells produce or have produced varying quantities of gas along with varying quantities of liquid hydrocarbons (oil or condensate) with the southern tiers of wells, in general, ranging more to oil with gas produc-

tion and the wells to the north from said southern wells, in general, ranging more to gas with oil or condensate production; that the Exhibit demonstrates the variability in the producing characteristics of the wells reflecting the variability in the inherent characteristics of the Mississippian and the low porosity thereof which appears from the Exhibit to have a median value of approximately six (6%) percent; that in connection with Exhibit No. 33, the witness testified that there are substantial quantities of gas and liquid hydrocarbons (oil and condensate) in place under the Application area, that said gas and liquid hydrocarbons (oil and condensate) are not being recovered by and will not be recovered by the existing wells and that more wells must be drilled in the area to effect maximum and optimum recovery from the Mississippian; that with respect to each and every Section in the Application area, where electric logs were available, volumetric reserves in place were determined and the results thereof were checked against the pressure vs. cumulative production history of the individual wells; that Exhibit No. 33 shows that more than one well has been drilled in the following:

Section	Wells	Producing Status
Section 32, T23N, R7W	2	1
Section 35, T23N, R8W	2	1
Section 4, T22N, R7W	2	1
Section 10, T22N, R8W	2	1
Section 11, T22N, R9W	2	1

Section 21, T22N, R8W	2	1
Section 30, T22N, R7W	2	2
Section 27, T22N, R8W	2	2
Section 34, T22N, R7W	2	2
Section 33, T22N, R7W	2	2
Section 32, T22N, R7W	2	2
Section 36, T22N, R9W	2	2
Section 35, T22N, R9W	2	2
Section 9, T21N, R8W	2	2

Exhibit No. 35— is a late filed Exhibit having reference to Exhibit No. 33 tabulating the data which was not available in the preparation of that Exhibit.

Exhibit No. 36 is the same plat as Exhibit No. 33 on which there is superimposed, in red, the results of a computer-confirmed study having as its purpose the determination of the effective drainage of each well. The plat is referred to as an Iso-drainage Map with the red lines representing lines of equal area drainage. The Exhibit shows that the maximum drainage of any well on the Exhibit is no more than 226 acres as shown by the Union Texas Petroleum-Rhodes-State Well in the NE/4 SW/4 Section 13, T22N, R8W; no well on the Exhibit is shown as draining 640 acres and the Exhibit shows that no well can ever be expected to drain 640 acres even in the area north of the southern tiers of Sections where the wells range more to gas with oil or condensate production. This Exhibit must be considered in, and in connection with, Exhibit No. 37, No. 40, No. 57, and Exhibit No. 73. Exhibit No. 57 was presented by

the protestants and shows that the area of maximum gross cumulative production centers on the Union Texas Petroleum-Rhodes-State well in Section 13, T22N, R8W, before mentioned. Said Exhibit No. 57 is confirmatory of Exhibits No. 33 and No. 73. During the hearing it was pointed out as shown by Exhibits No. 33, and No. 40, that certain information was not available in the preparation of Exhibit No. 33. During a recess in the hearing additional electric logs were made available to Applicants and the Isodrainage map, Exhibit No. 73, was prepared and shows more comprehensively the drainage areas of wells.

Exhibit No. 37 is a series of computer printouts showing, with respect to certain wells, calculations involving a determination of the drainage areas of the wells shown.

Exhibit No. 38 is an analysis, from the normal 1/8th royalty owner's view point, of a typical new well, reserves and economics, which produces ultimately 19,708 barrels of oil and 3165.709 MMCF of gas. Said new well would pay such owner $856,431 with a present net worth, discounted at 10%, of $671,825.

Exhibit No. 39 — page one (1) of the Exhibit is an analysis, from the normal 1/8th royalty owner's viewpoint, assuming 144 new wells drilled on an increased density basis (not a 160-acre unit basis) in the Application area with twelve (12) of such wells drilled during the first year, 24 wells drilled in the second year and 36 wells in each of the next three (3)

years and with the total wells ultimately producing 2,825,712 barrels of oil and approximately 453,952.992 MMCF of gas. Said new wells would pay such owners' $99,231,208, with a present net worth, discounted at 10%, of $60,903,468.

Page two (2) of the Exhibit is an analysis, from the normal 1 / 8th royalty owner's viewpoint, assuming 208 new wells drilled in the area covered by the Application with 104 wells drilled during the first year and 104 wells drilled during the second year and with the total wells ultimately producing 4,067,408 barrels of oil and approximately 656,604.032 MMCF of gas. Said new wells would pay such owners $184,469,312, with a present net worth discounted at 10%, of $136,976,848.

Exhibit No. 40 — porosity is an important ingredient in determining oil or gas in place and the drainage area of a well. This Exhibit is a small copy of Exhibit No. 36; on Exhibit No. 40, in green, are wells on which, at time of preparation of Exhibit No. 36 no electric logs, and thus no porosity-data, were available. This Exhibit No. 40 must be reviewed in connection with Exhibit No. 73 which was prepared after certain owners in the area furnished Applicants with some of the electric logs not available when Exhibit 36 was prepared.

Exhibit No. 41 — is the same as Exhibit No. 33 on which there has been superimposed, in red, a line of an east-west (Exhibit No. 42)

electric log cross-section of the Mississippian and, in green, a line of a north-south (Exhibit No. 43, below) electric log cross-section of the Mississippian; that the east-west green line on the Exhibit was drawn, in cross examination, by the witness as a line south of which, in general, the wells range more to oil with gas production and to the north of which the wells range more to gas with oil or condensate production.

Exhibit No. 42 — is an electric log cross-section of the Mississippian (red line A-A' on Exhibit No. 41) which shows that the Mississippian is a continuous common source of supply, in an east-west direction, throughout the area covered by the Application as does the well distribution and density shown on Exhibit No. 36; the thickness of the Mississippian is shown between the top and base lines. The abnormally thick Mississippian in the Shell Oil Company B. J. Rhodes No. 118 well in Section 18, T22N, R7W is an uncorrected interval in a deviated well.

Exhibit No. 43 — is an electric log cross-section of the Mississippian (Green line B-B on Exhibit No. 41) which shows that the Mississippian is a continuous source of supply in a north-south direction throughout the area covered by the Application. The abnormally thick Mississippian in the Shell Oil Company deviated well is also shown.

Exhibit No. 73 — is a plat up-dating the drainage areas of wells based on electric logs and information furnished during a recess in the

hearing; this Exhibit is considered and referred to under Exhibit No. 36 above.

The foregoing Exhibits were presented on behalf of Applicants through four witnesses all of whom are petroleum engineers with extensive engineering, geological, production and oil economics experience. In addition to such Exhibit, all oral or written statements of those witnesses have been considered.

2. Protestants' Exhibits:

Exhibits No. 44 and 45 — are copies of oil and gas leases, Exhibit No. 44 being a form only, showing W. T. Massey and Joseph Kent Massey dba Massey & Massey as Lessee which leases, admittedly, are representative of numerous oil and gas leases held by such parties, as Lessee, in the area covered by the Application; that leases of the kind shown have been taken from mineral owners in the Area some of whom heretofore have executed oil and gas leases to the protestants herein with the protestants' leases now being held by production from wells drilled on 640-acre drilling and spacing units;

Exhibit No. 47 — is a typewritten report of a meeting held in Enid, Oklahoma, whereat the substance of the Application heard in this Cause was discussed with interested owners. The Exhibit was prepared by an Attorney at Law attending the meeting at the request of some of the protestants. In substance, the Exhibit shows that the legal and

equitable problems which attend the Application were discussed.

Exhibit No. 48—is a plat sponsored by Union Texas Petroleum which shows the 640-acre drilling and spacing unit area covered by Order No. 50337, as amended, as well as the 640-acre unit area covered by Order No. 49133, as amended, both showing deletion areas and Sections with additional wells permitted. This Exhibit shows, in a different way, the same information shown on Applicants' Exhibits No. 30, No. 31, and No. 33; there are no substantial or material variations with respect to the information shown on the Exhibits;

Exhibit No. 49—is a plat sponsored by Union Texas Petroleum showing the outline of the area covered by the Application and the Mississippian wells within such area; the Exhibit is comparable to Applicants' Exhibit No. 33 but no detailed well information is shown; Exhibit No. 49 shows the areas, hatched in blue lines, covered by Union Texas Petroleum's oil and gas leases all of which are being held by production by wells producing in the 640-acre units; additionally, with respect to certain wells, cumulative production data is shown which confirms Applicants' evidence that the southern tiers of wells in the Application area, in general, range more to oil with gas production and the wells to the north, in general, range more to gas with oil or condensate production.

Exhibit No. 50 — consists of separate pages of a petition signed by thirty seven (37) owners of normal 1/8th royalty interest and working interest protesting the granting of the Application; during the hearing twenty three (23) of the above withdrew their names from the petition and supported the Application;

Exhibit No. 51 — is a plat, comparable to Exhibit No. 49, by Union Texas Petroleum showing, in yellow, the oil and gas leases which Union Texas Petroleum represents will continue to be held by production if the Application herein is granted and, in green, the oil and gas leases which Union Texas Petroleum represents would be lost to it if the Application herein is granted; that during the hearing it was noted that Union Texas Petroleum has filed, pursuant to the terms and provisions of its oil and gas leases, voluntary pooling agreements with respect to some of its leases but the net effect of those agreements, if any, was not shown;

Exhibits No. 52, No. 53 and No. 54 — sponsored by Union Texas Petroleum relate to the Courter No. 1 Well in the NE/4 SW/4 Section 21, T22N, R8W which was plugged and abandoned because of mechanical difficulties; Exhibit No. 54, estimates that said well, when plugged and abandoned, had attributable, at an abandonment pressure of 150 PSIG, to it remaining reserves of 11,530 barrels of oil and 1270.279 MMCF of gas. A replacement well was drilled on the same

section and it is estimated, at abandonment pressure of 150 PSIG, to have an ultimate recovery of 8193 barrels of oil and 1205.346 MMCF of gas;

Exhibit No. 56 — is a plat, sponsored by Champlin Petroleum Company, which shows the area, outlined in red, covered by the Application and the general area of Champlin Petroleum Company operations; in addition, the Exhibit is a structural map showing the southwestern dip of the Mississippian and showing other areas wherein Champlin Petroleum has an interest; thereon, in blue and red dots, are twenty-seven (27) wells in which Champlin has an interest and which have been or will be completed in 1978;

Exhibit No. 57 — is a plat, sponsored by Champlin Petroleum Company, showing gross cumulative production as of January 1, 1978, in the area covered by the Application herein and in other contiguous areas; this Exhibit confirms other Exhibits herein and shows that, generally, within the Application area the wells with the highest gross cumulative production coincide with the areas of best drainage as shown on Applicants' Exhibit No. 36 and the wells with lower gross cumulative production generally coincide with the areas of poorest drainage as shown on said Exhibit No. 36;

Exhibit Nc. 58 — is a plat showing, in yellow, Champlin Petroleum Company oil and gas leases in the Application area with that Com-

pany currently participating in 31 producing units;

Exhibit No. 59 — is a plat showing, in yellow, thirty-three (33) 640-acre units in which Champlin Petroleum Company has an interest;

Exhibit No. 60 — is a plat showing, in yellow, those 160-acre tracts within 640-acre units on which Champlin Petroleum Company interest wells have been drilled and are producing; the areas in blue represent the 160-acre tracts, within 640-acre units, on which there are no producing wells in the Mississippian;

Exhibit No. 61 — is a plat showing the outline of the area within which wells have cumulative gas/oil ratios greater than 75,000 cubic feet per barrel of oil; this Exhibit confirms the evidence of Applicants and other witnesses who expressed the view that the southern tiers of sections in the Application area range more to oil with gas production while the sections to the north range more to gas with oil or condensate production;

Exhibit No. 62 is a graph which shows the pressure decline profile of four (4) selected wells; i.e., Section 7, T22N, R8W
Section 8, T22N, R8W
Section 17, T22N, R8W
Section 18, T22N, R8W
with respect to time; the wells respectively, as shown on Exhibit No. 61, have cumulative gas/oil ratios of 197MG/1BO, 160MF/1BO, 133MG/1BO and 140MG/1BO;

Exhibit No. 63—is a graph which shows the pressure decline profile of four (4) selected wells; i.e., Section 21, T22N, R8W
Section 22, T22N, R8W
Section 23, T22N, R8W
Section 24, T22N, R8W
with respect to time; the wells respectively, as shown on Exhibit No. 61, have cumulative gas/oil ratios of 110MG/1BO, 92MG/1BO, 85MG/1BO, and 67MG/1BO;

Exhibits No. 64, No. 64-A and No. 65 — were presented to show the economic impact, in protestants' viewpoint, based upon a two case analysis: Case A which assumes ultimately recoverable reserves of 5 billion cubic feet of gas per 640-acre unit with 4 billion cubic feet of gas having already been produced and Case B — assuming ultimate recoverable reserves of five billion cubic feet of gas per 160-acre tract with 4 billion cubic feet of gas having been produced. The net conclusion reached on the assumptions made is that, if 160-acre units are established there will be an adverse economic impact upon the owners of working interest and upon the owners of the normal 1 / 8th royalty interest and particularly those royalty owners who have a well on their land and who have been sharing the royalty production with others in the 640-acre unit.

Exhibit No. 66 — is a plat of Harper Oil Company which shows the Application area outlined in black and the wells of that company, both in and out of that area, which are addi-

tional wells drilled on 640-acre units since 1972; the plat further shows Sections 26 and 35, T22N, R8W, which are not included in the Application area, because Harper Oil Company has drilled three wells on each Section but even after approximately 15 years that Company has not drilled all of the wells in Section 26 which that Company represented to this Commission were necessary to drain all of the recoverable oil and gas therefrom;

Exhibit No. 67 — is a plat showing additional wells spudded in the year 1978 both in and out of the Application area by Harper Oil Company; the wells are shown in orange color; only three (3) of the ten (10) wells shown fall in the Application area.

Exhibit No. 68 — is a plat showing the general Sooner Trend area, including the Application area served by Oklahoma Natural Gas Company as a purchaser; that said company objected to the Application, in part, because of the npact the granting thereof might have upon its natural gas customers.

Exhibits No. 69 and 70 — are graphs presented by Atlantic Richfield Company of 160-acre density oil wells increased to 80 acres in the Sooner Trend, the first of which shows the results from development upon oil production in barrels of oil per day of its drilling program of 30 wells started in 1963 and the additions to that daily oil producing rate by its 32 well drilling program started in 1974; Exhibit 70 postulates what that daily production might have been had the bottom hole

pressure in the areas of the 1974 drilling program not already been partly reduced by the wells drilled and produced in the 1963 program:

Exhibit No. 71 — is a copy of the opinion in *California et al* vs. *Southland Royalty Company* et al, No. 76114, Certiorari to the United States Court of Appeals for the Fifth Circuit, decided May 31, 1978;

Exhibit No. 72 — is an economic study of Section 33, T22N, R7W assuming the establishing of 160-acre units after the first well was completed in the Section but before the second well was completed therein; the Exhibit assumes, if the 640-acre units remain in effect for an oil well that each quarter section will be paid $67,000 actual royalty; i.e. each quarter section will share equally; but if the 160-acre units had been established before the Moravek No. 2 Well is drilled and no additional wells are drilled, that the SE/4 and NW/4 Section 33 each will get $27,300 royalty; that SW/4 Section 33 will get $64,100 royalty and overriding royalty;

The foregoing Exhibits were presented on behalf of the protestants through several witnesses among whom were a lawyer, computer expert-engineer, land person and petroleum engineers with extensive engineering, geological, production and oil economics experience. In addition to the Exhibits, all oral or written statements of the witnesses have been considered.

(d) Commission conclusions:

i. That, in general, the evidence of the Applicants and of the Protestants is comparable when viewed from the standpoint as to the conditions and knowledge of conditions in the Mississippian when Orders No. 49133 and No. 50337 were issued and when viewed from the standpoint of the now known conditions and knowledge of conditions therein; that, despite reasonably comparable knowledge derived from historical and present development and operations, Applicants and protestants differ as to what is the most reasonable and equitable basis for the future orderly further development of the Mississippian; that protestants, who have been granted numerous exceptions to Orders No. 49133, as amended, and to No. 50337, as amended, by way of well density and varying drilling unit size upon allegations and proof that there has been a change in conditions or a change in knowledge of conditions in the Mississippian, now contend that there has been no change of conditions or knowledge of conditions with respect to the 640-acre units, in the area of the Application since they were first established;

ii. that protestants urge that the appropriate statutory remedy herein is to further develop the area on an increased well density basis, pursuant to applications to be filed either with respect to each drilling and spacing when an owner in a unit shall have determined, that such application should be filed or otherwise; that the interest of the Commission in the prevention of waste and in the protection of cor-

relative rights and the duty and responsibility of the Commission to prevent waste and protect correlative rights require that the Commission not act in derogation of its interest, duty and responsibility by such an indirect delegation of its duty and responsibility to any owner whose subjective interests may be in conflict with the ends of waste prevention or correlative rights protection;

iii. that there is substantial evidence to show that there has been and that there is a change in conditions and a change in knowledge of conditions in that it is now known, from the historical development and production in the Application area that the Mississippian is far less conducive to being effectively and efficiently drained by one (1) well to each 640-acre unit than was supposed and contemplated when Order No. 49133 and Order No. 50337 were first issued, both in 1962; that the porosity and the drainage of wells in the Mississippian are much less effective and efficient than earlier anticipated; that even though reservoir pressure depletion occurs with wells now producing on the 640-acre unit basis such pressure depletion is not and will not cause the Mississippian, on a 640-acre unit basis, to be effectively and efficiently drained thus resulting in the unnecessary depletion or inefficient utilization of the gas energy contained in the common source of supply so that substantial quantities of ultimately economically recoverable oil, gas, and condensate are not being and will not be recovered by the continued development and production of the Mississippian on a

640-acre unit basis; nor can correlative rights be best protected by a continuation of such 640-acre units; that in the said Mississippian within the Application area it is now reasonably required that 160-acre drilling and spacing units be established; that the well on each 160-acre unit is necessary to effectively and efficiently drain a portion of the reservoir covered by the unit, which portion of the reservoir cannot be effectively and efficiently drained by any existing well within the 640-acre unit;

iv. that, it has been stipulated as set out in the Preliminary Order herein, that the entire Application area is underlain by the Mississippian and that the Mississippian is a combination reservoir or reservoirs;

v. that, the gas-oil ratio and cumulative gas production evidence herein shows that substantial quantities of gas will be produced in the south tiers of wells where the witnesses concur that the wells run to oil and gas production and will be produced in the North wells where all concur that the wells range more to gas and it appears that such characteristics necessitate that all units in the area be 160-acre;

vi. that, to prevent or to assist in preventing waste and to protect or assist in protecting correlative rights of all interested parties, an Order should be issued vacating Order No. 49133, as amended, and Order No. 50337, as amended, as to the Mississippian, the top of which is encountered in the area at depths ranging from about 6300 feet to 6700 feet below the surface, and as to the 640-acre drilling and

spacing units established by such Orders, as amended, with respect to the following lands in Major and Garfield Counties, Oklahoma: Sections 2, 5, 6, and 9, T21N, R8W, Sections 11 thru 14, 23 thru 26, 35 and 36, T22N, R9W; Sections 30, 31, 32, and 34, T23N, R7W; Sections 31 thru 36, T23N, R8W; Sections 1 thru 25, 27 thru 34, and Section 36, T22N, R8W; Sections 3 thru 25 and 27 thru 31, 33 and 34, T22N, R7W; and said Order No. 49133, as amended, should again be amended to include within the purview thereof all of the lands just described and 160-acre drilling and spacing should be established with respect to such lands and each unit should be a quarter governmental section with the permitted well on each unit to be drilled on the unit not closer than 660 feet to the unit boundary thereof and well location exceptions should be granted for any well heretofore drilled to and producing from the Mississippian as to any unit so established; that the Application should not be granted as to Section 7 and 8, T21N, R8W, Section 33, T23N, R7W; the Application was dismissed as to said Sections 8 and 33 and said dismissal should be granted; the Application should not be granted as to Section 32, T22N, R7W, on which there are already four (4) wells; that Sections 25 and 36, T22N, R8W each have three wells thereon and it was proper not to have included said Sections with this Application;

vii. that, the Commission has been administering the development and production in the Mississippian in the areas covered by Order No. 49133, as amended, and Order No. 50337, as

amended, by increasing or enlarging the size of the drilling and spacing units both before and after wells have been drilled and producing on such units and has authorized increased density wells depending upon the relief which the Commission, in those instances concluded to be proper and in this instance the Commission concludes that the establishing of 160-acre units is the proper relief, even though other relief may be available, based on the substantial evidence herein;

viii. that, all of the contentions of protestants have been duly considered but after reviewing all of the evidence and the law applicable thereto the Commission finds that it is necessary, under the evidence herein and for the purposes of the prevention of waste and the protection of correlative rights, that the Commission, authorize, provide for and establish the 160-acre drilling and spacing units requested by Applicants to the ends that a greater ultimate recovery of oil, gas, and condensate be had from the Mississippian, waste be prevented and the correlative rights of the owners of oil and gas interests therein be, to a fuller extent, beneficially enjoyed and protected.

ORDER

IT IS THEREFORE ORDERED by the Corporation Commission of Oklahoma as follows:

1. That the 640-acre drilling and spacing units heretofore established, respectively, by Order No. 49133, as amended, and by Order No. 50337, as amended, as to the

lands next described be and the same hereby are vacated, set aside, and held for naught with respect to said lands as follows:

Sections 2, 5, 6 and 9, T21N, R8W, Sections 11 thru 14, 23 thru 26, 35 and 36, T22N, R9W; Section 30, 31, 32, and 34, T23N, R7W; Sections 31 thru 36, T23N, R8W; Sections 1 thru 25, 27 thru 34, and Section 36, T22N, R8W; Sections 3 thru 25 and 27 thru 31, 33 and 34, T22N, R7W.

2. That drilling and spacing units be and the same are hereby established as follows:

Common Sources of Supply	Classification	Drilling and Spacing Unit Size
Mississippian	Combination reservoir	160 acres

underlying Sections 2, 5, 6, and 9, T21N, R8W; Sections 11 thru 14, 23 thru 26, 35 and 36, T22N, R9W; Sections 30, 31, 32, and 34, T23N, R7W; Sections 31 thru 36, T23N, R8W; Sections 1 thru 25, 27 thru 34, and Section 36, T22N, R8W; Sections 3 thru 25 and 27 thru 31, 33 and 34, T22N, R7W, by amending Order No. 49133, as amended, to include said lands.

3. That drilling and spacing units shall be quarter governmental sections.

4. That each well hereafter drilled to said common sources of supply on each drilling and spacing unit established hereby must be drilled on the unit but not closer than 660 feet to the boundary thereof; provided that each well heretofore drilled and producing on any quarter governmental section not on the pattern prescribed is granted an exception and shall be the well for the unit on which same is situated.

5. That all royalty interests within each drilling and spacing unit are pooled and unitized and each royalty owner shall share in the one-eighth (1 / 8) of all production from any well thereon in the proportion that the acreage owned by each such royalty owner bears to the entire acreage in the drilling and spacing unit.

6. That when there are two (2) or more separately owned tracts or undivided interests separately owned within any drilling and spacing unit established hereby, the owners thereof may validly pool their interests and develop the drilling and spacing unit as a unit; that where, however, such owners have not agreed to so pool their interests and to develop the drilling and spacing unit as a unit, their rights and equities shall be pooled and adjudicated as provided in subsection e, Section 87.1, Title 52, O.S.

7. That no more than one (1) well shall hereafter be produced from the common sources of supply named above on any drilling and spacing unit established hereby and the permitted well on any drilling and spacing unit established hereby shall be drilled only at the location thereon as prescribed above, unless the Commission, prior to the drilling of said well, shall have authorized a well location exception therefor in accordance with subsection d, Section 87.1, Title 52, O.S.

8. That attached, and a part hereof as Exhibit "A," is a plat of the drilling and spacing units established by this Order and the permitted well therefor.

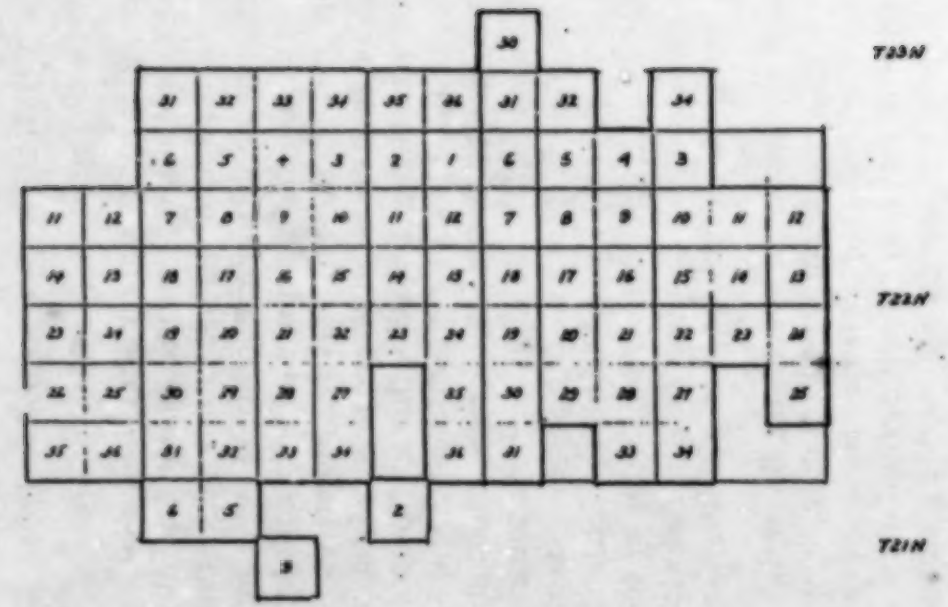
9. That this Order shall be effective as of the 1st day of January, 1979.

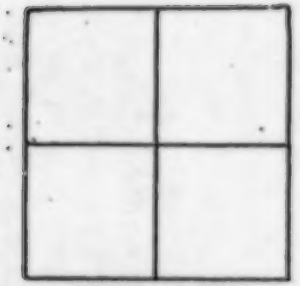
DONE AND PERFORMED this 3rd day of January, 1979.

CORPORATION COMMISSION OF OKLAHOMA

Hamp Baker, Vice Chairman
Jan Eric Cartwright,
Commissioner

(Seal)
ATTEST:
Ed Overholser, Secretary





CAUSE CD NO. 54890

EXHIBIT "A"

Unit Size: 160 acres (Governmental quarter-section)

Well Location: Not closer than 66 feet to unit boundary.

Common Source of Supply: Mississippian

52 OKLA. STAT. (1978), § 87.1—CONSERVATION OF OIL AND GAS

§ 87.1. Common source of supply of oil-well spacing and drilling units.—Whenever the production from any common source of supply of oil or natural gas in this state can be obtained only under conditions constituting waste or drainage not compensated by counter-drainage, then any person having the right to drill into and produce from such common source of supply may, except as otherwise authorized or in this section provided, take therefrom only such proportion of the oil or natural gas that may be produced therefrom without waste or without such drainage as the productive capacity of the well or wells of any such person considered with the acreage properly assignable to each such well bears to the total productive capacities of the wells in such common source of supply considered with the acreage properly assignable to each well therein.

(a) To prevent or to assist in preventing the various types of waste of oil or gas prohibited by statute, or any of said wastes, or to protect or assist in protecting the correlative rights of interested parties, the Commission, upon a proper application and notice given as hereinafter provided, and after a hearing as provided in said notice, shall have the power to establish well spacing and drilling units of specified and approximately uniform size and shape covering any common source of supply, or prospective common source of supply, of oil or gas within the State of Oklahoma; provided, that the Commission may authorize the drilling of an additional well or wells on any spacing and drill-

ing unit or units or any portion or portions thereof or may establish, reestablish, or reform well spacing and drilling units of different sizes and shapes when the Commission determines that a common source of supply contains predominantly oil underlying an area or areas and contains predominantly gas underlying a different area or areas; provided further that the units in the predominantly oil area or areas shall be of approximately uniform size and shape, and the units in the predominantly gas area or areas shall be of approximately uniform size and shape, except that the units in the gas area or areas may be of nonuniform size and shape when they adjoin the units in the oil area or areas; provided further that the drilling pattern for such nonuniform units need not be uniform, and provided further that the Commission shall adjust the allowable production within said common source of supply, or any part thereof, and take such other action as may be necessary to protect the rights of interested parties. Any order issued pursuant to the provisions hereof may be entered after a hearing upon the petition of any person owning an interest in the minerals in lands embraced within such common source of supply, or the right to drill a well for oil or gas on the lands embraced within such common source of supply, or on the petition of the Conservation Officer of the State of Oklahoma. When such a petition is filed with the Commission, the Commission shall give at least fifteen (15) days' notice of the hearing to be held upon such petition by one publication, at least fifteen (15) days prior to said hearing, in some newspaper of general circulation printed in Oklahoma City, Oklahoma, and by one publication, at least fifteen (15) days prior to the date of said hearing, in some newspaper printed in the county, or in each county, if there be more than one, in which

the lands embraced within the application are situated. Except as to the notice of hearing on such a petition, the procedural requirements of Sections 84 to 135, inclusive, of Title 52, Oklahoma Statutes, shall govern all proceedings and hearing provided for by this section.

(b) In case of a spacing unit of one hundred sixty (160) acres or more, no oil and/or gas leasehold interest outside the spacing unit involved may be held by production from the spacing unit more than ninety (90) days beyond expiration of the primary term of the lease.

(c) In establishing a well spacing or drilling unit for a common source of supply thereunder, the acreage to be embraced within each unit not to exceed a maximum of six hundred forty (640) acres for a gas well plus ten percent (10%) tolerance, except fractional sections along the state boundary line may be spaced with adjoining section unit, and the shape thereof shall be determined by the Commission from the evidence introduced at the hearing, and the following facts, among other things, shall be material:

(1) The lands embraced in the actual or prospective common source of supply; (2) the plan of well spacing then being employed or contemplated in said source of supply; (3) the depth at which production from said common source of supply has been or is expected to be found; (4) the nature and character of the producing or prospective producing formation or formations; (5) any other available geological or scientific data pertaining to said actual or prospective source of supply which may be probative value to said Commission in determining the proper spacing and well drilling unit therefor, with due and relative allowance for the cor-

relative rights and obligations of the producers and royalty owners interested therein.

The order establishing such spacing or drilling units shall set forth: (1) the outside boundaries of the surface area included in such order; (2) the size, form, and shape of the spacing or drilling units so established; (3) the drilling pattern for the area, which shall be uniform except as hereinbefore provided; and (4) the location of the permitted well on each such spacing or drilling unit. To such order shall be attached a plat upon which shall be indicated the foregoing information. Subject to other provisions of this act, the order establishing such spacing or drilling units shall direct that no more than one well shall thereafter be produced from the common source of supply on any unit so established, and that the well permitted on that unit shall be drilled at the location thereon as prescribed by the Commission, with such exception as may be reasonably necessary where it is shown, upon application, notice and hearing in conformity with the procedural requirements of Sections 84 to 135, inclusive, Title 52, Oklahoma Statutes, and the Commission finds that any such spacing unit is located on the edge of a pool and adjacent to a producing unit, or for some other reason that to require the drilling of a well at the prescribed location on such spacing unit would be inequitable or unreasonable. Whenever such an exception is granted, the Commission shall adjust the allowable production for said spacing unit and take such other action as may be necessary to protect the rights of interested parties.

(d) The Commission shall have jurisdiction upon the filing of a proper application therefor, and upon notice given as provided in subsection (a) above, to decrease the size of the well spacing units or to permit additional

wells to be drilled within the established units, upon proper proof at such hearing that such modification or extension of the order establishing drilling or spacing units will prevent or assist in preventing the various types of wastes prohibited by statute, or any of said wastes, or will protect or assist in protecting the correlative rights of persons interested in said common source of supply, or upon the filing of a proper application therefor to enlarge the area covered by the spacing order, if such proof discloses that the development or the trend of development indicates that such common source of supply underlies an area not covered by the spacing order and such proof discloses that the applicant is an owner within the area covered by the application. The Commission shall not establish well spacing units of more than forty (40) acres in size covering common sources of supply of oil, the top of which lies less than 4,000 feet below the surface as determined by the original or discovery well in said common source of supply. The Commission shall not establish well spacing units of more than eighty (80) acres in size covering common sources of supply of oil the top of which lies less than 9,990 feet and more than 4,000 feet below the surface as determined by the original or discovery well in said common source of supply.

(e) The drilling of any well or wells into any common source of supply for the purpose of producing oil or gas therefrom, after a spacing order has been entered by the Commission covering such common source of supply, at a location other than that fixed by said order is hereby prohibited. The drilling of any well or wells into a common source of supply, covered by a pending spacing application, at a location other than that approved by a special order of the Commission authorizing the

drilling of such well is hereby prohibited. The operation of any well drilled in violation of any spacing so entered is also hereby prohibited. When two or more separately owned tracts of land are embraced within an established spacing unit, or where there are undivided interests separately owned, or both such separately owned tracts and undivided interests embraced within such established spacing unit, the owners thereof may validly pool their interests and develop their lands as a unit. Where, however, such owners have not agreed to pool their interests and where one such separate owner has drilled or proposes to drill a well on said unit to the common source of supply, the Commission, to avoid the drilling of unnecessary wells, or to protect correlative rights, shall, upon a proper application therefor and a hearing thereon, require such owners to pool and develop their lands in the spacing unit as a unit. All orders requiring such pooling shall be made after notice and hearing, and shall be upon such terms and conditions as are just and reasonable and will afford to the owner of such tract in the unit the opportunity to recover or receive without unnecessary expense his just and fair share of the oil and gas. The portion of the production allocated to the owner of each tract or interests included in a well spacing unit formed by a pooling order shall, when produced, be considered as if produced by such owner from the separately owned tract or interest by a well drilled thereon. Such pooling order of the Commission shall make definite provisions for the payment of cost of the development and operation, which shall be limited to the actual expenditures required for such purpose not in excess of what are reasonable, including a reasonable charge for supervision. In the event of any dispute relative to such costs, the Commission shall determine the

proper costs after due notice to interested parties and a hearing thereon. The operator of such unit, in addition to any other right provided by the pooling order or orders of the Commission, shall have a lien on the mineral leasehold estate or rights owned by the other owners therein and upon their shares of the production from such unit to the extent that costs incurred in the development and operation upon said unit are a charge against such interest by order of the Commission or by operation of law. Such liens shall be separable as to each separate owner within such unit, and shall remain liens until the owner or owners drilling or operating the well have been paid the amount due under the terms of the pooling order. The Commission is specifically authorized to provide that the owner or owners drilling, or paying for the drilling, or for the operation of a well for the benefit of all shall be entitled to production from such well which would be received by the owner, or owners, for whose benefit the well was drilled or operated, after payment of royalty, until the owner or owners drilling or operating the well have been paid the amount due under the terms of the pooling order or order settling such dispute. No part of the production or proceeds accruing to any owner of a separate interest in such unit shall be applied toward payment of any cost properly chargeable to any other interest in said unit.

For the purpose of this section, the owner, or owners, of oil and gas rights in and under an unleased tract of land shall be regarded as a lessee to the extent of a seven-eighths (⅞) interest in and to said rights and a lessor to the extent of the remaining one-eighth (⅛) interest therein. Should the owners of separate tracts or interests embraced within a spacing unit fail to agree upon a pooling of their interests and the drilling

of a well on the unit, and should it be established by final, unappealable judgment of a court of competent jurisdiction that the Commission is without authority to require pooling as provided for herein, then, subject to all other applicable provisions of this act, the owner of each tract or interest embraced within a spacing unit may drill on his separately owned tract, and the allowable production therefrom shall be that portion of the allowable for the full spacing unit as the area of such separately owned tract bears to the full spacing unit.

In the event a producing well, or wells, are completed upon a unit where there are, or may thereafter be, two or more separately owned tracts, any royalty owner or group of royalty owners holding the royalty interest under a separately owned tract included in such spacing unit shall share in the one-eighth (⅛) of all production from the well or wells drilled within the unit, or in the gas well rental provided for in the lease covering such separately owned tract or interest in lieu of the customary fixed royalty, in the proportion that the acreage of their separately owned tract or interest bears to the entire acreage of the unit; provided, where a lease covering any such separately owned tract or interest included within a spacing unit stipulates a royalty in excess of one-eighth (⅛) of the production, or said lease shall be subject to an overriding royalty, to production payment or other obligation, then the lessee of said lease out of his share of the working interests from the well drilled on said unit shall sustain and pay said excess royalty, overriding royalty, or production payment, and therefrom meet any other obligation due in respect to the separately owned tract or interest held by him.

Amended by Laws 1977, c. 76, § 1, emerg. eff. May 25, 1977.

Construction and application

Oil and gas conservation statutes require that evidence show that area for which drilling and spacing units are established must be underlain by common source of supply; State Corporation Commission has no authority to include known nonproductive area in drilling and spacing unit. ***Caudillo v. Corporation Commission, Okl., 551 P.2d 1110 (1976).***

Hladik v. Lee, Okl., 541 P.2d 196 (1975).

Previous spacing order establishing formation underlying section as a common source of supply, together with evidence that applicant held oil and gas leases covering the north 480 acres of section, established jurisdiction of the Corporation Commission to enter order authorizing applicant to drill a well within the south 160 acres of the section, despite contention that applicant had no interest in the minerals in such portion of the section. ***Texas Oil & Gas Corp. v. Rein, Okl., 534 P.2d 1277 (1974).***

The power of the Corporation Commission to regulate the production of oil and gas is derived from the police power but is limited by the statutes authorizing such regulation. ***Helmerich & Payne, Inc. v. Corporation Commission, Okl., 532 P.2d 419 (1975).***

Lessees

Barton v. Cleary Petroleum Corp., Okl.Cr., 566 P.2d 462 (1977).

Ward v. Corporation Commission, Okl., 501 P.2d 503 (1972).

Royalty interests

Where royalty provision of oil and gas lease called for payment of one-eighth to lessor, plaintiff's assignor, "at the market price at the well for gas sold," where corporation commission subsequently entered a spacing order stating that all royalty interests within a unit would be communitized and each owner would participate in royalty from a well drilled thereon in the relation his acreage bore to total unit acreage, where plaintiff was paid a royalty out of all production from well in proper proportion, but where prices for gas received in sale by defendant, plaintiff's lessee, were higher than prices sold by other working interest owners, defendant was not required to pay plaintiff in addition, out of its working interest, as a statutory "other obligation," the difference between the low gas price and higher gas price. *Pierce v. Texas Pac. Oil Co., Inc., C.A. Okl., 547 F.2d 519 (1976).*

Where limited partnership bringing alleged class action on behalf of royalty owners entitled to be paid royalties under terms of certain oil and gas leases or a pooling order of State Corporation Commission covering a gas well claimed that section of land in which class owned all of mineral interest was established by order as one 640-acre drilling and spacing unit for production of gas from common source of supply and that a subsequent order pooled all oil and gas interests for production from formation in that section, class members had common and undivided interest in one-eight royalty interest in all gas produced from pooled formation by virtue of communitization of their fractional mineral interests and, accordingly, claims of each class member were joint or common and could be aggregated to satisfy federal jurisdictional amount requirement. *Rochet Oil & Gas Co. v. Arhla Exploration Co., D.C.Okl., 435 F.Supp. 1303 (1977).*

BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA

IN THE MATTER OF THE APPLICATION OF FLYING DIAMOND OIL CORPORATION FOR AN ORDER PERMITTING THE DRILLING OF AN ADDITIONAL WELL IN SECTION 9, TOWNSHIP 21 NORTH, RANGE 5 WEST, GARFIELD COUNTY, OKLAHOMA, TO PRODUCE FROM THE MISSISSIPPI FORMATION.	) CAUSE CD NO. 58861
IN THE MATTER OF THE APPLICATION OF LORENE ROGGOW FOR AN ORDER DELETING 640-ACRE MISSISSIPPI LIME, BIG LIME-OSWEGO AND MISENER-HUNTON SPACING COVERING SEC. 9-21N-5W, GARFIELD COUNTY, OKLAHOMA, AND FOR AN ORDER EXTENDING 160-ACRE MISSISSIPPI LIME, BIG LIME-OSWEGO AND MISENER-HUNTON SPACING TO COVER SAID SECTION.	) CAUSE CD NO. 57690) ORDER NO. 152489

REPORT OF THE COMMISSION

These Causes came on for hearing before Harry E. Brown, Jr., Acting Trial Examiner for the Corporation Commission of the State of Oklahoma, on the 13th day of March, 1979, at 9:00 A.M., Jim Thorpe Building, Oklahoma City, Oklahoma, for the purpose of hearing, tak-

ing testimony, and reporting findings and recommendations to the Commission.

C. Harold Thweatt, Attorney, appeared for the Applicant, Flying Diamond Oil Corporation in Cause C. D. No. 58861; Harry C. Marberry, Attorney, appeared for Lorene Roggow in Cause C. D. No. 57690; and Harvey H. Cody, Conservation Attorney, appeared for the Commission.

The Trial Examiner heard the Causes and filed his report to which Exceptions were filed by Lorene Roggow. After hearing the arguments on the Exceptions on April 17, 1979, the Commission adopts the Report of the Trial Examiner and finds as follows:

FINDINGS

1. That Cause C. D. 58861 is an Application requesting permission to drill an additional well in Section 9, Township 21 North, Range 5 West, Garfield County, Oklahoma, to produce oil and gas from the Mississippi Lime. The Application alleges that another well is necessary in order to protect correlative rights and prevent underground waste.

2. That Cause C. D. 57690 is an Application requesting an order deleting 640-acre Mississippi Lime, Big Lime-Oswego and Misener-Hunton spacing covering Section 9-21N-5W, Garfield County, Oklahoma, and extending 160-acre spacing for said formations to cover said Section.

3. That above causes were joined for the purpose of hearing by agreement of the parties named herein.

4. That notice has been given in all respects as required by law and by the Rules of the Commission.

5. Mr. George E. Fort testified for Lorene Roggow, the owner of the minerals underlying the S/2 of the herein described Section 9. He testified only one well, No. 1 Pralle had been drilled in Section 9, completed in the Mississippi formation. Nearly all of the township was originally spaced for 640-acre Mississippi gas or 80-acre oil and gas spacing for the formation. In 1978, the Commission deleted 640-acre Mississippi spacing covering Sections 5 and 8 which are contiguous to Section 9 on 160-acre units. Sections 10, 15 and 22 have been deleted from 640-acre Mississippi spacing and established 80-acre spacing for said formation.

The witness attempted to show that the situation in Sections 5 and 8 was similar to the situation in the subject Section 9. That the first well in Section 5 was drilled in the NW/4 and completed in the Mississippi but later plugged; that the second well was drilled in August, 1977, in the NE/4 and completed as a well producing both oil and gas from the Mississippi; that the section was deleted and a third well drilled in the SE/4 of Section 5 in May, 1978, and a fourth well drilled in the SW/4 of Section 5 in November, 1978. That the first well was drilled in the NE/4 of Section 8 in 1969 and that well has been plugged and a second well has been drilled, after deletion and respacing, in the NW/4 of Section 8. That witness concluded that deleting and spacing resulted in more wells being drilled faster than does increased density, and he recommended to the Commission that they delete 640-acre Mississippi spacing from under Section 9 and establish 160-acre spacing for said formation underlying said section. In this connection, the witness did not think that the Mississippi should be developed on 80's and it was his opinion that these wells would produce approximately 30-40,000

barrels of oil and 500 MMCF of gas, and that the oil would just about pay the costs of drilling, which are about $350,000 and the gas sales would constitute the profit. He testified that there was a change of condition in the knowledge of the area by the drilling of wells on a density of less than 640-acres to test the Mississippi formation, showing that one well will not drain the recoverable hydrocarbons from under a 640-acre drilling and spacing unit, and requested that the deletion and respacing plan be followed instead of increased density.

6. Mr. Ed Staats testified for Flying Diamond. He stated Flying Diamond's position is that the Flying Diamond Pralle #1-9 Well in the NE/4 of Section 9 is a Mississippi gas well that is attributable to the 640-acre Mississippi unit. That Flying Diamond wants permission to drill another well in the NW/4 of Section 9 to produce from the Mississippian. The testimony showed quite conclusively that the only production of interest in the area is the Mississippi production.

He testified that he is Flying Diamond's manager in the area; that the Pralle #1-9 Well, was completed as a gas well on April 15, 1977, and has a gas/oil ratio at the present time of approximately 26,000 cubic feet of gas to each barrel of oil; the well is producing about 5 barrels of oil per day; that the sharing of the production from the Pralle Well has been on a 640-acre basis, and that it would be unfair for the Commission to delete and establish 160-acre drilling and spacing units.

Flying Diamond requested the Commission to give it a 6-month's grace period in which to protect its leases in Section 9 in the event the Commission decides to destroy the 640-acre unit and establish 160-acre drill-

ing and spacing units. The Roggow testimony was that Section 5 had been deleted from 640-acre spacing by Order No. 133021 and that Section 8 had been deleted by Order No. 13978. The testimony showed that the Mississippi wells in Sections 5 and 8 are oil wells as contradistinguished from gas wells.

That it has been the policy of the Commission where there has been a sharing of production to intensify drilling rather than re-spacing. The recent Garfield County order is an exception to long established policy.

7. Both parties agree a new well is needed. Flying Diamond filed their Application January 31, 1979 wherein it sought increased density. Lorene Roggow filed her petition November 13 to delete 640-acre spacing and respace on 160-acre. However, the Pralle #1-9 well in Section 9 was completed on April 15, 1977. That equities have been established on the basis of a 640-acre unit and payments have been made to all owners within said unit. That Flying Diamond indicated the unit would be developed on the basis of increased density. Edwin F. Pralle, the owner of the mineral interest in the NE/4 of Section 9, testified he had been sharing 75% of the proceeds of the Pralle #1-9 well with the other owners in Section 9 and he thought it fair to share in any future wells in the Section.

ORDER

IT IS THEREFORE ORDERED by the Corporation Commission of the State of Oklahoma as follows:

1. That the Application of Lorene Roggow in CD No. 57690 be and the same is hereby denied.

2. That the Application of Flying Diamond Oil Corporation in CD No. 58861 for permission to drill another well in Section 9, Township 22 North, Range 5 West, Garfield County, Oklahoma, to produce oil and gas from the Mississippi Lime is granted. Said well shall be commenced within one hundred twenty (120) days after the date of this Order and shall be located at some point in the 640-acre drilling and spacing unit not closer than 1320 feet of the unit boundary. Authority to drill said well terminates unless said well is commenced within the specified period.

3. There shall be but one gas allowable for the 640-acre gas unit which shall be producible from the well or wells selected by operator. All gas wells shall for allocation purposes be reported as a single unit. The operator may select the well to be tested for the required annual test and shall report the results as the test for the unit. The allowable for the unit shall be based on the annual test. Production from all gas wells shall be combined and reported by the purchaser and the operator as the production from the unit.

4. The well authorized by this Order is necessary to effectively and efficiently drain a portion of the Mississippi Formation common source of supply underlying the 640-acre drilling and spacing unit which cannot

be effectively and efficiently drained by the existing well.

DONE AND PERFORMED this 27 day of April, 1979.

CORPORATION COMMISSION OF OKLAHOMA

Hamp Baker, Chairman

Bill Dawson, Vice Chairman

Norma Eagleton, Commissioner

ATTEST:

Ed Overholser, Secretary

ADDITIONAL PARTIES TO THE OKLAHOMA CORPORATION COMMISSION PROCEEDING BELOW

Harvey W. Dierksen
Daisy L. Dierksen
Albert L. Dierksen
Jane W. Dierksen
Mary L. Dierksen
Deborah M. Sattehmeier
Clyde E. Phillips
June L. Phillips
F. E. Clowdus
Lenna D. Clowdus
DeWayne R. Atherton
Eva M. Atherton
Beatrice F. Strueben
John E. Struben
Daniel J. Jantz
Don Perry
Helen S. Perry
Coletta Perry
Mary E. Holland
Mike J. Holland
Walter E. Krumrei, Jr.
Marilyn L. Krumrei
Martha Marie Brakhage
Chris Brakhage
Ruby L. Frey
Rosa May Dierksen
Fred A. Dierksen
Eldon J. Craig
Aletha Craig
Beulah Craig
E. L. Alexander
Estella F. Alexander
J. Louis Lamunyon
Velma Lamunyon
Kenneth G. Fischaber
Lucius F. Pratt
Eva H. Tathwell

Letha Pratt
Ebba M. Johnson
William F. Johnson
Spencer Dixon
William J. Kruchenberg
Ann C. Crandall
Max E. Crandall
Carolyn E. Semrad
Alfred E. (Gus) Semrad
Cecile Watts
Lorene Richards
Arthur Davis
Henry Davis
Edith Davis
Roland V. Ehlers
Anton J. Semrad
Florence G. Kaupke
Carl Brune
Caroline S. Brune
John Brune
Delmer Brune
Gerhard J. Brune
Paul W. Brune
Gertrude A. Brune
Elmer Brune
Cecil Oringderff
Deloros Oringderff
Zeda Theilen
Theodore A. Hudnall
Scott Benkendorf
Sally Benkendorf
Iris Benkendorf
Janice Gratke
Lee Gratke
Mark Benkendorf
Wilma J. Benkendorf
Dale Baade
Marcella Davis Rodgers
Isabelle J. Buckminster Ward
Anna L. Lauppe
William G. Lauppe

Lois H. Lauppe
Barbara Lauppe Kellert
Albert E. Kellert
Irene Lauppe Dautenhahn
Irmen Dautenhahn
Freeda Ann Benkendorf
Leona M. Campbell
Leighton E. Campbell
Letha Sharp
Rex Lamunyon
Elna Lamunyon
Melvin Benkendorf
Delphine Benkendorf
Hazel Hudnall
Sybil Buckminster
F. E. Buckminster
Isabell Kerfoot
Theron W. Dixon
Carolyn E. Semrad
Alfred E. (Gene) Semrad
Anton J. Semrad
Herbert D. Coulter
Willa Mae Coulter aka (Mrs. Herb Coulter)
Mary Leigh Coulter
Glen Ott
Mrs. Glen Ott
Glenn Courter
Earl Parker, Jr.
Mrs. Earl J. Evans
Mrs. Earl Baker
Marvin W. Baker
Barbara A. Baker
Vonnie Roth

PARENT COMPANIES, SUBSIDIARIES AND AFFILIATES OF PETITIONERS

Amerada Hess Corporation

Wyatt, Inc.
Solar Gas, Inc.
Oasis Oil Company of Libya, Inc.
Bushehr Petroleum Co.
Matco Tankers (U.K.) Ltd.
Anglomar Shipping Company, Ltd.
First United Shipping Corp.
Second United Shipping Corp.
Third United Shipping Corp.
Interocean Tanker Corp.
Granreunion Co.
Atles Marine Co.
Artemis Marine Co. L.P.
Ariadne Co. L.P.
St. Croix Petrochemical Corp.
Conmar Terminals, Ltd.
D'Ippolito Oil Company
Meadville Corporation
Reserve Terminal Corporation
Second Reserve Terminal Corp.
South Jersey Terminal Corp.

Atlantic Richfield Company

ARCO Oil Limited
ARCO Solar Europe, Inc.
ARCO Solar Far East Pte. Ltd.
Arilan, S.A. de C.V.
Atlantic Richfield Medical Products (Ireland) Limited
Alyeska Pipeline Service Company
Black Lake Pipe Line Company
Bingham Development Company
Badger Pipe Line Company
Blair Athol Coal Pty. Ltd.
Caribou-Chaleur Bay Mines, Ltd.

Caribou-Smith Mines, Ltd.
Chile Copper Company
Compania de Petroleo Ganso Azul, Ltda.
Compania Mexicana de Petroleo "El Charro", S.A.
Colonial Pipeline Company
Cook Inlet Pipeline Company
Defender Mining and Milling Corporation
Dragon Consolidated Mining Company
Delaware Bay Transportation Company
Dixie Pipeline Company
East Texas Salt Water Disposal Company
Flower Street Ltd.
Gas de Chile S.A.
Gravity Adjustment Inc.
Hydrokem Performance Chemicals Company
Iricon Agency Ltd.
Kenai Pipe Line Company
Lavan Petroleum Company
Mayflower Mining Company
Middle Swansea Mining Company
R.W. Miller (Holdings) Limited
Montoro, Empresa Para La Industria Quimica, S.A.
Nihon Oxirane Company, Ltd.
New Bingham Mary Mining Company
North Lily Mining Company
Oxirane Technology (Japan) Company
Oil Shippers Service, Inc.
P.T. Arutmin Indonesia
Park Cummings Mining Company
Park Premier Mining Company
Patten Mining Company
Platte Pipe Line Company
Smoke House Copper Mining Company
Tecumseh Pipe Line Company
Texas-New Mexico Pipe Line Company
Trans Mountain Oil Pipe Line Company
West Mayflower Mining Company
Hardy Oil Company
Sinclair Venezuelan Oil Company

Champlin Petroleum Company

Union Pacific Corporation

Ladd Petroleum Corporation

None

Mack Oil Company

None

Odessa Natural Corporation

El Paso Exploration Company
The El Paso Company

Oklahoma Natural Gas Corporation

None
Name has been changed to ONEOK, Inc.

Union Texas Petroleum, a Division of Allied Chemical Corporation

Burris Mills, Incorporated
Quantatron, Inc.
Manbritt Industries, Inc.
Aliada Quimica, S.A., Spain
D. Stemple A.G., West Germany
Haas'sche Schriftgiesserei A.G., Switzerland
Klippan Italia, S.p.A., Italy
L.I.N.E.B., S.A., France
Morisawa-Linotype, Ltd., Japan
Nippon Amorphous Metals Company, Ltd., (NAMCO) Japan
Quimica Industrial Norte de Sao Paulo, Ltda., Brazil
Sociedade Fornecedora de Minerios, Ltda., Brazil
Sofratype S.A., France
Supersulfato Industrias Quimicas, Ltda., Brazil
Chico Corporation
Leaseway All Services, Incorporated

Woods Petroleum Corporation

None